FINAL

Perfluorinated Compounds Preliminary Assessment

Former O'Hare Air Reserve Station, IL

Perfluorinated Compounds (PFCs) Release Determination at Multiple BRAC Bases



April 2016

Contract FA8903-08-D-8766 Task Order 0177

Prepared for:

Air Force Civil Engineer Center JBSA Lackland, Texas 4PAE08 Contract



FINAL

PERFLUORINATED COMPOUNDS PRELIMINARY ASSESSMENT

FORMER O'HARE AIR RESERVE STATION CHICAGO, ILLINOIS

PROJECT NO. DPNB20147242

Prepared for:

Air Force Civil Engineer Center

Joint Base San Antonio – Lackland, Texas





Prepared by:



Amec Foster Wheeler Environment & Infrastructure, Inc.

Contract FA8903-08-D-8766 Task Order 0177

April 2016

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DEPARTMENT OF THE AIR FORCE AIR FORCE CIVIL ENGINEER CENTER

April 7, 2016

AFCEC/CIBE 154 Development Drive, Suite G Limestone, ME 04750

Ms. Charlene Falco Remedial Project Manager Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, IL 60601

Re:

FINAL Perfluorinated Compounds Preliminary Assessment, Former O'Hare Air Reserve

Station, Chicago, Illinois

Ms. Falco,

Attached for your files is the *Final Perfluorinated Compounds Preliminary Assessment, Former O'Hare Air Reserve Station, IL* (PA). The PA presents findings from our recent records review and interview process aimed at identifying potential PFC releases across the former installation. No comments were received regarding the DRAFT PA.

If you have any questions, please contact me at (207) 328-7109 or david.strainge@us.af.mil.

Sincerely,

DAVID STRAINGE, GM-13, DAF BRAC Environmental Coordinator

AFCEC/CIBE - Loring

Attachment: FINAL Preliminary Assessment Report

cc: Karen Mason-Smith, USEPA, Region V

Billy Claxton, AFCEC/CIBE David Farnsworth, AFCEC/CIBE This page left intentionally blank.

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ACRONYMS

AF Air Force
AFB Air Force Base
AFBU Air Force Base Unit

AFBCA Air Force Base Conversion Agency
AFCEC Air Force Civil Engineer Center
AFFF Aqueous Film Forming Foam

AFHRA Air Force Historical Research Agency
AFRCTC Airport Reserve Combat Training Center
AFSAS Air Force Safety Automated System

AFSEC Air Force Safety Center

Amec Foster Wheeler Amec Foster Wheeler Environment & Infrastructure, Inc.

amsl above mean sea level
AR Administrative Record
ARFF Air Reserve Forces Facility

ARS Air Reserve Station
ARW Air Refueling Wing

AST Aboveground Storage Tank

AW Air Wing

BEC BRAC Environmental Coordinator

bgs Below Ground Surface
BAH Booz Allen Hamilton, Inc.
BRAC Base Realignment and Closure

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Crash, Fire, and Rescue

DoDI Department of Defense Instruction

DOW Department of Water
DR Document Repository

EBS Environmental Baseline Survey
EPA Environmental Protection Agency

ER Environmental Report

FEMA Federal Emergency Management Agency

FPM FPM Remediations, Inc.

ft feet or foot

FPTA Fire Protection Training Area

FTA Fire Training Area

HARZA Consulting Engineers and Scientists

ILANG Illinois Air National Guard

IEPA Illinois Environmental Protection Agency

IRP Installation Restoration Program

JP Jet Propellant

LUC/IC Land Use Controls/Industrial Controls

msl Mean Sea Level

NRCS National Resource Conservation Service

NWI National Wetland Inventory
OIA O'Hare International Airport
OMP O'Hare Modernization Program

ORD Orchard Place Airport
OWS Oil Water Separator
PA Preliminary Assessment
PFC Perfluorinated Compounds
PFOA Perfluorooctanoic Acid

PFOS Perfluorooctane Sulfonic Acid
POL Petroleum, Oil, and Lubricants

ROD Record of Decision

TO Task Order

USACE U.S. Army Corps of Engineers
USAF United States Air Force

USDOT United States Department of Transportation
USEPA United States Environmental Protection Agency

USFWS United State Fish and Wildlife Service

USGS United States Geological Survey
UST Underground Storage Tank
UWBZ Upper Water Bearing Zone

EXECUTIVE SUMMARY

This Perfluorinated Compounds (PFC) Preliminary Assessment (PA) provides findings from research conducted to determine whether and where aqueous film forming foam (AFFF), containing PFCs, was stored, handled, used or released at the former O'Hare Air Reserve Station (ARS), located in Chicago, Illinois. Research was conducted for the years 1970 through the installation closure in July 1999 using: 1) personnel interviews; 2) online research of the Administrative Record (AR) and other general search engines; 3) documents requested and provided by the Air Force Civil Engineer Center (AFCEC), and 4) archival research at the Air Force Historical Research Agency (AFHRA) and the Air Force Safety Center (AFSEC). Information obtained during the research was evaluated to determine if AFFF storage, handling, use or release areas, hereafter referred to as "AFFF areas," are located on the former O'Hare ARS. Potential AFFF areas may include:

- crash sites/aircraft fires;
- fire training areas (FTAs) used after 1970;
- areas with underground storage tanks (USTs), aboveground storage tanks (ASTs), drums, buckets, etc. where virgin or spent AFFF was stored with or without secondary containment;
- areas where AFFF use or release was documented via personnel interviews, environmental reports, electronic or print media, etc.; and,
- areas where AFFF was handled, used/released indoors.

Based on the research conducted, twelve AFFF areas were identified at former O'Hare ARS that may potentially require further action; however, all of the identified buildings no longer exist and major redevelopment of the former O'Hare ARS is ongoing under the O'Hare Modernization Program (OMP):

- 1) Former Building 17 (Band Center Original Fire Station): Facility stored five-gallon buckets of AFFF for use in Air Reserve Forces Facility (ARFF) trucks; however, no AFFF releases were documented.
- 2) Former Building 32 (Base Supply Warehouse): Facility stored 55-gallon drums of AFFF in an outside fenced storage area and inside the building; however, no AFFF releases were documented.
- 3) Former Building 35 (Fuel Cell Repair Shop Satellite Accumulation Point): Facility stored antiexplosion foam; however, no AFFF releases were documented.
- 4) Former Building 43 (Hangar): Facility maintained an AFFF fire suppression system from 1993 through base closure, and AFFF may have been released during initial system testing.
- 5) Former Building 55 (Base Pavement and Grounds Facility): Facility stored five barrels of AFFF as noted during a 1999 personal property inventory conducted prior to transfer of the former base to the city of Chicago in July 1999.
- 6) Former Building 56 (Vehicle Operations Heated Parking Facility Cover Storage): Eight to ten gallons of foam/water mixture were spilled on the west side of the building on 1 August 1994, which was reportedly contained and cleaned with absorbent materials (SPL-56).

- 7) Former Building 57 (Base Warehouse Supply): Facility stored leftover stock from Building 63 (Fire Station), which may have included AFFF.
- 8) Former Building 63 (Fire Station): Facility contained a 1,000 gallon AFFF AST, a 6,000 gallon AFFF AST, a 375 gallon steel AFFF tank, a 600 gallon steel AFFF tank, and a foam trailer, and four ARFF trucks were stored and washed inside and outside of this building. Three spills of AFFF were documented at this facility in 1994.
- 9) Former Building 81 (928th Supply Warehouse): Facility maintained an AFFF fire suppression system from 1992 through base closure, and AFFF may have been released during initial system testing.
- 10) Former Building 2917 (Liquid Fuel Fill Stand): Facility maintained a foam fire suppression system from 1993 through base closure, and AFFF may have been released during initial system testing.
- 11) Flightline Apron (SPL-2501-49): 45 gallons of AFFF/water mixture were spilled south of the flightline parking area on 16 July 1994, and reportedly recovered.
- 12) Former Drum Accumulation Area (OTH-2531-2): Facility temporarily stored AFFF during construction/renovation activities conducted at the former base from approximately the mid-1980s through the early 1990s.

1.0 INTRODUCTION

This Perfluorinated Compounds (PFCs) Preliminary Assessment (PA) for the former O'Hare Air Reserve Station (ARS) has been prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler)¹ on behalf of the Air Force Civil Engineer Center (AFCEC) under Contract No. FA8903-08-D-8766, Task Order (TO) 0177, PFCs Release Determination at Base Realignment and Closure (BRAC) Installations. The research is being conducted as part of United States Air Force (USAF) enterprise-wide response to possible release of PFCs per Department of Defense Instruction (DoDI) 4715.18, Emerging Contaminants, in general accordance with Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Furthermore, all research is being conducted proactively by the USAF outside of any regulatory requirements. This report provides findings from research conducted to determine whether and where aqueous film forming foam (AFFF), containing PFCs, was stored, handled, used or released at the former O'Hare ARS, located in Chicago, Illinois (Figure 1).

1.1 Background

PFCs are a large group of synthetic fluorinated compounds that are widely used to make everyday products more resistant to heat, stains, grease, and water. PFCs are also components in firefighting foams. The chemical structures of PFCs make them resistant to natural environmental degradation. Due to their persistence in the environment, bioaccumulation potential, and toxicity, PFCs have a potential impact on human health and the environment. Currently, PFCs are not regulated by the United States Environmental Protection Agency (USEPA) or the Illinois Environmental Protection Agency (IEPA); however, the USEPA has recently developed provisional health advisories for two PFCs (perfluorooctane sulfonic acid [PFOS] and perfluorooctanoic acid [PFOA]) to protect against potential exposure risk through drinking water (USEPA, 2009).

Several Federal government documents confirm the initial use of AFFF by the USAF beginning in 1970:

- Military Specification for AFFF (MIL-F-24385), formally issued in 1969;
- General Accounting Office determination on sole source award protest to provide AFFF to the Navy in December 1969; and,
- A History of USAF Fire Protection Training at Chanute Air Force Base, 1964-1976 (Coates, 1977).

The USAF began purchasing and using AFFF containing PFCs (PFOS and/or PFOA) for extinguishing petroleum fires and firefighting training activities in 1970 (USAF, 2012). AFFF was used at USAF installations in and around fire training areas (FTAs). AFFF could also have been used at other areas within installations, such as in and around hangars that had AFFF fire suppression systems, plane crash and fire emergency response sites, firefighting equipment testing areas, wash racks, areas where fire trucks and/or emergency vehicles were washed, and AFFF storage areas.

¹ AMEC Environment & Infrastructure, Inc. changed its name on 1 January 2015 to Amec Foster Wheeler Environment & Infrastructure, Inc., to reflect AMEC's acquisition of Foster Wheeler. Contract FA8903-08-D-8766 was modified on 26 March 2015 to reflect the name change. All resource documents created under AMEC Environment & Infrastructure, Inc. remain in place and are executed under Amec Foster Wheeler Environment & Infrastructure, Inc.

1.2 Objective

The objective of the PFC PA is to identify areas where AFFF was potentially stored, handled, used or released within the former O'Hare ARS to aid the USAF in exercising due diligence to protect human health and the environment. For the purposes of this report, areas where AFFF was stored, handled, used or released are referred to as "AFFF areas." The word "release" in this report refers to areas where AFFF was intentionally or unintentionally discharged.

This PFC PA focuses on other potential AFFF areas, presents results from the research and evaluation of potential use of AFFF at the former O'Hare ARS, and concludes whether a reasonable basis exists to suspect PFC presence.

1.3 Scope

To achieve the aforementioned objectives, research was conducted using: 1) personnel interviews; 2) online research of the Administrative Record (AR) and other general search engines; 3) documents requested and provided by AFCEC, and 4) archival research at the Air Force Historical Research Agency (AFHRA) and the Air Force Safety Center (AFSEC). Research was conducted to find information on AFFF areas at the former O'Hare ARS for the years 1970 through the installation closure. Limited information was also obtained regarding the potential use of AFFF after installation closure, and is provided in **Appendix A**.

2.0 INSTALLATION DESCRIPTION

The former O'Hare ARS is located in Chicago, Cook County, Illinois, and occupied approximately 352 acres in the northeast corner of the O'Hare International Airport (OIA) (**Figure 1**). The station was in operation from October 1942 through July 1999, and was subsequently transferred to the city of Chicago for use by OIA (**Figure 2**) (HARZA Consulting Engineers and Scientists [HARZA], 1997).

2.1 Former Mission and Land Use

The land for the former O'Hare ARS was part of Orchard Place, a small farming community settled by German immigrants and New England Pioneers in the 1840s and developed into a railroad stop in 1887. The station was activated in 1942 for use as an aircraft assembly plant and was originally called Orchard Place Airport (ORD). The government converted the former farmland into an aircraft assembly plant by the addition of a power house, personnel office, cafeteria, administration building, maintenance garage, assembly building, hangar, paint shop, and paint storage building. Because of its proximity to a railroad stop, the station was leased to Douglas Aircraft Company in 1943 as an assembly plant for C-54 cargo aircraft and called the Chicago Aircraft Assembly Plant Number 8 (HARZA, 1997; Booz Allen Hamilton, Inc. [BAH], 2007).

The station was controlled by the 803rd Army Air Force Reserve Specialized Depot in 1946, and used by the 141st[†] Air Force Base Unit (AFBU) for reserve training. During this time, the station was known as the Douglas-Orchard Airport. The 247st Air Force Reserve Combat Training Center (AFRCTC) replaced the 141st AFBU in 1948 and remained the supervisory unit until 1950. In 1949, the 437th and 441st Troop Carrier Wings Reserve were activated and the station was renamed USAF O'Hare Field, Chicago International Airport. The airfields were opened to commercial traffic in 1955, and in 1958 the 928th Air Wing (AW) became the supervisory unit. The 928th AW used the Fairchild C-119 Flying Boxcar and, in 1970, began using the C-130A Hercules. Three periods of major construction occurred at the facility from 1965 to 1968, 1976 to 1978, and 1985 to 1989, during which time numerous buildings were added (HARZA, 1997). O'Hare ARS shared the runway with the OIA until station closure. Runway 9R/27L was opened in late 1967 and Runway 4R/22L was dedicated in 1971. Major tenants of the former O'Hare ARS included the Illinois Air National Guard (ILANG) and its assigned units, including the 126th Air Refueling Wing (ARW), the 217th Electronic Installation Squadron, the 264th Combat Communications Squadron, and the 566th Air Force Band. The Defense Logistics Agency was also based at the former O'Hare ARS (HARZA, 1997).

O'Hare ARS historically contained four FTAs/fire protection training areas (FPTAs): FPTA (Installation Restoration Program [IRP] Site FT-03), Suspected Former FTA (OTH-FT), and two Former FPTAs. IRP Site FT-03 is located outside the former O'Hare ARS BRAC property near the southeast boundary and operated from approximately 1955 through the early 1960s (**Figure 2**). It consisted of a 100-foot (ft)-diameter clay pit surrounded by an earthen berm, Combustible materials, including aviation and automobile gasoline, waste oil, kerosene, solvents, and hydraulic fluid were burned in the pit. The site was covered with construction debris and wood upon cessation of tire training activities. This area was transferred to the city of Chicago in 1990 as part of a land exchange agreement. The Suspected Former FTA (OTH-FT) was reportedly used for fire training from 1955 through the early 1960s in the area of Landfill 1 (**Figure 2**). The

two Former FPTAs were located on OIA property to the northwest of the former O'Hare ARS under a joint training agreement and used from the early 1960s through at least the 1980s. The first Former FPTA was reportedly located just north of Higgins Road and the second Former FPTA was located one mile to the south of the first FPTA; however, the exact locations were not specified (Engineering-Science, 1983). IRP Site FT-03 and OTH-FT were closed prior to the USAFs introduction of AFFF in 1970 and, as such, are not considered to be potential AFFF areas. The Former FPTAs are also not considered as potential AFFF areas under this PA since they are located on property transferred to the city of Chicago in 1990 and not part of the 1999 BRAC action.

The station was added to the approved closure list as part of the 1995 round of BRAC. The 92th Air Lift Wing was deactivated in 1997 and the 126th ARW was designated as the host unit until closure of the station in July 1999. The Air Force Base Conversion Agency (AFBCA) was responsible for environmental cleanup and property disposal (BAH, 2007).

2.2 Current Land Use and Property Information

The former O'Hare ARS was transferred to the city of Chicago after station closure in 1999 for use by the OIA. The former station is undergoing extensive reconstruction under Chicago's O'Hare Modernization Program (OMP), whereby the OIA is expanding eastward into the footprint of the former station. As a result, the majority of the original buildings and structures at the former O'Hare ARS have been demolished, except for Building 4 (Claxton, 2015). Long-term objectives include transforming the O'Hare ARS airfield from an intersecting runway system into a parallel runway system, and utilizing the remainder of the former station for various airport support facilities. The construction is scheduled to be completed in 2015 and is in compliance with approved Land Use Controls/Industrial Controls (LUC/ICs) for the former station (FPM Remediations, Inc. [FPM], 2013).

Land use for the former station and surrounding area is industrial/commercial and is unlikely to change. Agricultural and residential use of the property is prohibited by the land use deed restrictions placed on the property during transfer to the city of Chicago (FPM, 2013).

2.3 Environmental Data

The following sections describe the environmental characteristics of the installation.

2.3.1 Geology and Soils

The former O'Hare ARS is located in the Chicago Lake Plain physiographic province which is characterized as a flat plain that was once the bottom of ancestral Lake Chicago. The physiography of the region is the result of Pleistocene age, notably the Wisconsinan, glaciation that carved out Lake Michigan, which lies to the east. Soils in this area are mapped as glacio-lacustrine deposits consisting of poorly drained lake clay and silt, and lake sand and gravel. Clayey till of the Wedron Formation also is present as moraines (United States Geological Survey [USGS], 2015).

Topographic relief across the former installation is approximately 15 feet (ft), with elevations ranging from approximately 635 ft above mean sea level (amsl) in the east to approximately 650 ft amsl to the north of

the station. The former station slopes gently to the northeast towards the Des Plaines River, and is surrounded by low plains to the east and a poorly drained hilly area to the west (HARZA, 1997).

Unconsolidated glacial deposits of Quaternary age underlie the former station to depths of approximately 70 to 85 ft below ground surface (bgs) and thicken to the north. Bedrock exposures are only noted in major river valleys such as the nearby Des Plaines River. The unconsolidated glacial deposits consist of relatively uniform clayey till with sand and gravel, and contain discontinuous lenses of silt and sand that are generally less than 1 ft thick, but have been encountered up to 10 ft (FPM, 2013).

The glacial deposits are underlain by layered sedimentary rock units of Silurian, Ordovician, and Cambrian age, respectively. The underlying Silurian and Ordovician units dip gently to the east and consist predominantly of dolomite interbedded with shale and sandstone. The uppermost Silurian formation is composed of the Niagara Dolomite, which is a dense dolomite with many joints and solution channels with a thickness of approximately 135 ft. The underlying Ordovician formations are composed of, in descending order, the Maqouketa Shale (approximately 230 ft thick); the Galena Dolomite, Decorah Formation and Platteville Formation (approximately 320 ft thick; and the Glenwood Formation and St. Peter Sandstone (approximately 145 feet thick), and the Prairie du Chien Group (approximately 95 ft thick). The deeper and older Cambrian units are predominantly sandstone and also dip gently to the east. The Cambrian units are comprised, in descending order, of the Trempealeau Formation (approximately 125 ft thick); the Franconia Formation (approximately 90 ft thick); the Ironton Sandstone and Galesville Formations (approximately 200 ft thick), the Eau Clair Formation (approximately 235 to 450 ft thick); and, the Mt Simon Sandstone (approximately 2,000 ft thick). Precambrian crystalline rock underlies the sedimentary units and lies at an estimated depth of 4,000 ft below mean sea level (HARZA, 1997).

2.3.2 Surface Water

No surface water bodies are located on the former O'Hare ARS, and the National Wetland Inventory (NWI) and Natural Resources Conservation Service (NRCS) wetland inventory maps did not indicate the presence of designated wetlands on the former station. The northern and eastern portions of the former O'Hare ARS are located within the 100-year floodplain of Willow Creek, according to the Federal Emergency Management Agency (FEMA) flood insurance rate maps (HARZA, 1997).

Stormwater drainage at former O'Hare ARS is directed through a stormwater drainage system and two open drainage ditches to Willow Creek, located approximately 350 ft north and 1,300 ft east of the former station (**Figure 2**). Runoff from OIA and surrounding properties also discharges to these open drainage ditches (FPM, 2013). Willow Creek is a 6.1 mile modified earthen channel that discharges to the Des Plaines River approximately one mile to the east near Highway 72 (HARZA, 1997).

2.3.3 Groundwater

Three groundwater aquifers have been identified beneath the former O'Hare ARS, including the glacial drift, shallow dolomite of Silurian age, and the Ordovician-Cambrian sandstones. The upper water-bearing zone (UWBZ) is located within the glacial drift that is located in the 70 to 85 ft of unconsolidated material found beneath the former station. Groundwater in the glacial drift may be encountered as

shallow as 10 to 20 ft bgs; however, flow is variable due to the nature of the discontinuous sand and silt lenses. Regional groundwater flow in the glacial drift is to the east toward the Des Plaines River (FPM, 2013).

The UWBZ is hydraulically connected to the underlying Silurian age dolomite bedrock. This aquifer is approximately 135 ft thick and groundwater is generally present in joints and solution channels. Groundwater elevations and flow in the dolomite aquifer are not known beneath the former station, but regional flow in the aquifer is to the east toward Lake Michigan. The deep aquifer is separated from the overlying UWBZ and dolomite aquifer by approximately 230 ft of impermeable Maquoketa Shale. Groundwater flow in the deep aquifer is primarily through water-bearing dolomites and sandstones, and is the primary drinking water source for the area (FPM, 2013).

2.3.4 Drinking Water Supply

Drinking water was supplied to the former O'Hare ARS and surrounding area by the city of Chicago, Department of Water (DOW). The City of Chicago DOW obtains water from Lake Michigan through numerous facilities that include two water purification plants, three active intake cribs and tunnels that convey water from Lake Michigan to the plants, three treated water tunnel systems that distribute purified water to local pumping stations, and twelve potable water pumping stations (HAZRA, 2007).

Groundwater use within the former O'Hare ARS, city of Chicago, Village of Rosemont, and city of Des Plaines is prohibited. A groundwater restriction was included in the deed for the former station upon transfer to the city of Chicago. A restrictive covenant was placed on the former station by the City of Chicago, on behalf of the USAF, to prohibit future use of groundwater as potable or non-potable water sources (FPM, 2013).

2.3.5 Biological/Ecological Profile

Limited habitat exists on or near the former O'Hare ARS, since the majority of the station has been altered by human activities and is covered by buildings, pavement, and mowed lawns. The former O'Hare ARS is unlikely to contain breeding areas or crucial habitat for migratory birds or shelter for wildlife; however, the former station and immediate surrounding area is located within the range of federal and/or state threatened or endangered species as follows:

- Indiana bat (Myotis sodalis) Federal and State-listed Endangered;
- Black tern (Chlidonias niger) State Endangered;
- Peregrine falcon (Falco peregrinus) Federal and State-listed Endangered;
- Upland sandpiper (Bartramia longicauda) State Endangered;
- Marsh hawk or Northern harrier (Circus Cyaneus) State Endangered;
- Pied-billed grebe (*Podilymbus podiceps*) State Threatened;
- Long-eared owl (Asio Otus) State Endangered;
- Upland sandpiper (Bartramia longicauda) State Endangered;
- Sandhill crane (*Grus canadensis*) State Endangered;
- American bittern (Botaurus lentiginosus) State Endangered;
- Great egret (Ardea Alba) State Threatened;
- Wilson's phalarope (*Phalaropus tricolor*) State Endangered;

- Black-crowned night-heron (Nycticorax nycticorax) State Endangered; and
- Early fen sedge (Carex crawei) State Threatened.

Black terns have been reported at former O'Hare ARS, which are a Category 2 candidate species according to the United State Fish and Wildlife Service (USFWS). One endangered animal species (Indiana bat) has been observed as transient species in Cook County, and three bird species have been observed as migratory or transient species, including the upland sandpiper, marsh hawk, and peregrine falcon. A field survey indicated a small stand of the state-threatened early fen sedge in a wetland area located approximately 0.8 miles from the former station; however, no other state or federally listed endangered or threaten species are known to occur in the immediate vicinity of the former station (United States Department of Transportation [USDOT], 1984; HARZA, 1997).

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3.0 PREVIOUS PFC INVESTIGATIONS

No previous PFC investigations have been conducted at the installation.

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4.0 RESEARCH ACTIVITIES

To initiate the research process, a general PFC information questionnaire for former O'Hare ARS was completed by Mr. David Strainge, the BRAC Environmental Coordinator (BEC) for the installation. This completed questionnaire provided general information on the installation and is included in **Appendix B**. The information provided includes: a summary of AFFF storage areas, hangars with AFFF fire suppression systems, and information pertaining to calibration and washing of fire department trucks and vehicles.

The following sections describe the research conducted through record and document reviews and interviews.

4.1 Summary of Interviews

Amec Foster Wheeler conducted four interviews of past and present installation employees as part of this research project. The employees were interviewed by telephone to document their knowledge of former AFFF use at O'Hare ARS. A summary of the interviewees (name, title, date and interview relevance) is provided in **Table 1**, and information obtained from the interviews is documented on the PFC General Questionnaire provided in **Appendix B**, and Telephone Interview Logs provided in **Appendix C**.

Person Interview Title Relevance of Interview Interviewed Date(s) **David Strainge BEC** 21 May 2015 No pertinent information. Assistant Fire Chief, Knowledge of use of AFFF at the Fire 5 and 8 June **Dennis Claxton** O'Hare ARS Station, storage of AFFF, and washing and 2015 (1974-1 July 1997) calibration of ARFF trucks. Chief Master Sergeant and Reserve Fire Chief Knowledge of storage of AFFF at Fire (1980-1997)**Bob Meade** 4 June 2015 Station, ARFF truck washing and calibration, City of Chicago Training and additional contact information Officer, Airport Division (1990-2001) Provided information pertaining to Fire Live Fire Training Lieutenant Wagner Specialist, City of Chicago 4 June 2015 Station, ARFF washing, FTAs, and additional (1988-Present) contact information.

Table 1: Summary of Interviews

Interviewees identified the Fire Station and other buildings where AFFF was stored on the former O'Hare ARS and discussed ARFF truck washing and calibration. Relevant AFFF information included the following:

- Former Building 17 (Former Fire Station; Figure 2): Facility stored AFFF in 5-gallon buckets at the
 original fire station for use in the four ARFF crash fire trucks. ARFF trucks were washed outside
 the building because there was no room inside. The fire station was also used by the City of
 Chicago under a joint use agreement (Claxton, 2015; Meade, 2015).
- Former Building 32 (Former Base Supply Warehouse; Figure 2): Bulk AFFF was stored at this
 facility after the mid 1980s in 55-gallon drums. AFFF was initially stored outside in a fenced-in

storage area; however, the AFFF was transferred inside the building for storage since it was determined to be weather sensitive (Claxton, 2015).

- Former Building 63 (Former Fire Station; **Figure 2**): Facility stored AFFF in 5-gallon buckets and a 1,000 gallon propylene plastic aboveground storage tank (AST) for use in the four ARFF crash fire trucks, in addition to a small foam trailer. The ARFF trucks were washed in the southwest bay of the building, which drained into an OWS. The fire station was used by the city of Chicago under a joint use agreement through station closure in 1999, and for approximately one year thereafter, before the building was demolished. AFFF was not stored in this building during City of Chicago use from station closure through 2000 (Claxton, 2015; Meade, 2015; and Wagner, 2015).
- Former Drum Accumulation Area (OTH-2531; **Figure 2**): Temporary storage area for AFFF drums in the late 1980s or early 1990s during station construction/renovation activities, which is located on concrete pavement between former buildings 19 and 30 (Claxton, 2015).

4.2 Review of Records

The internet was used to obtain records such as historical images and drawings, technical reports, property records, news articles, and other available or appropriate information to aid in documenting the use of AFFF at former O'Hare ARS. The AFCEC AR was the primary source of information as it included the most environmental documents for the installation. The BRAC Document Repository (DR) was also researched, and documents were provided by AFCEC for review. Other general search engines were also used to locate news articles and other information. After the internet research was completed, a review of available documents was conducted at: 1) the AFHRA at Maxwell Air Force Base (AFB) located in Montgomery, Alabama; and, 2) the AFSEC at Kirtland AFB located in Albuquerque, New Mexico. All research was documented on Research Logs (**Appendix D**), with a summary of the research included in the following sections.

4.2.1 Administrative Record Document Review

The online AFCEC AR (http://afcec.publicadmin-record.us.af.mil/) was utilized to identify potential documents and reports relevant to AFFF usage at the installation. Keywords searched within the AR included "fire," "crash," "accident," "mishap," "AFFF," "foam," "wash racks." Building or facility names mentioned in interviews or identified based on research on potential AFFF uses in other documents in the AR were also searched in order to identify further information on their uses, locations, and status. Table 2 summarizes the six relevant documents identified during the search and subsequently reviewed. Additional supporting information, including the document Research Logs, is located in Appendix D.

Table 2: Summary of Relevant Reports from the Administrative Record

AR Document Number	Document	Date	Relevance		
03	IRP Phase I – Records Search O'Hare Air Reserve Forces Facility, Illinois	December 1983	Identified Building 63 as the Fire Station and three FPTAs used by the former station, and described methods of waste disposal.		
08	Final Environmental Impact Statement Chicago O'Hare		Provided information pertaining to relocation of crash, fire, and rescue (CFR) facilities.		
120	Phase I Environmental Baseline Survey, O'Hare Air Reserve Forces Facility, Chicago, Illinois	January 1997	Provided information on fire stations, AFFF storage and documented spills, as well as information pertaining to site history, geology, wastewater, surface drainage, hydrology, and threatened and endangered species.		
922	First Five-Year Review Report for the Former O'Hare Air Reserve Station, Chicago, Illinois	September 2007	Provided information on the subdivision of the former station into three parcels, and identified OTH-FT (Suspected Fire Training Area) and OTH-2531-2 as being in Parcel 3.		
300619 Final Second Five-Year Review Report for Former O'Hare Air Reserve Station, Chicago, Illinois		July 2013	Provided updated information on land use, groundwater use, and land transfer and restrictive covenants.		

AR Document Number 03 (Engineering-Science, 1983): The document identified Building 63 as the Fire Station and three FPTAs used by the former station. An FPTA was located on the southeastern portion of the former station and was used from 1955 through the early 1960s, and two other Former FPTAs were located on OIA property and were used under a joint training agreement with the city of Chicago from the early 1960s through at least the 1980s. The FPTA located on the southeastern portion of the former station (currently known as IRP Site FT-03) was closed prior to the USAFs introduction of AFFF in 1970 and, as such, is not considered to be a potential AFFF area. The Former FPTAs are also not considered as potential AFFF areas under this PA since they are located on property transferred to the city of Chicago in 1990 and not part of the 1999 BRAC action.

AR Document Number 08 (USDOT, 1984): The document provided information pertaining to the relocation of CFR facilities due to construction of a new runway. The primary CFR facility adjacent to Concourse B was to be demolished and relocated in 1985 to the proposed cargo/freight forwarder facility west of Runway 32L. The document indicated CFR #2 would also require relocation south of the new cargo complex.

AR Document Number 120 (HARZA, 1997): The document identified Buildings 17 and 63 as fire stations, Building 32 (Base Supply Warehouse) as storing fire suppressant chemicals in 55 gallon drums, Building 35 (Fuel Cell Repair Shop - Satellite Accumulation Point) as generating anti-explosion foam saturated with jet propellant (JP)-4, and Building 57 (Base Warehouse Supply) as storing leftover stock, potentially AFFF, from Building 63 after 1995, and provided information on AFFF storage at Building 63 (1,000 gallon and 6,000 gallon ASTs) and AFFF/foam spills, including a 45 gallon AFFF spill on the flightline apron on 16 July

1994 (SPL-2501-49), an 8 to 10 gallon spill of foam/water mixture at Building 56 (Vehicle Operations Heated Parking Facility - Covered Storage) on 1 August 1994, and three AFFF spills at Building 63 (45 ounces spill on 21 August 1994; 40 ounces on 30 September 1994; and, 10 gallons on 28 November 1994). The document also included information on site history, geology, wastewater, surface drainage, hydrology, and threatened and endangered species.

AR Document Number 922 (BAH, 2007): The documented provided information on the subdivision of the former station into three parcels, and identified OTH-FT (Suspected Fire Training Area; **Figure 2**) and OTH-2531-2 (Former Drum Accumulation Area) as being located in Parcel 3. OTH-FT is a suspected FTA located near Landfill No.1 that was believed to have been used for firefighting training exercises until approximately 1970; however, this FTA was closed prior to the USAFs introduction of AFFF in 1970 and, as such, is not considered to be a potential AFFF area. OTH-2531-2 (Former Drum Accumulation Area) was a former Hazardous Waste Drum Accumulation Point located on a concrete area within the Aircraft Washrack Pad (OTH-2531-1) near Building 20, where hazardous waste from hangar operations was stored. The concrete was reported as being stained in 1983, which may have been representative of past spills.

AR Document Number 300619 (FPM, 2013): The documented provided additional information on land use, groundwater use, surface water use, and land transfer and restrictive covenants.

Review of relevant information from the AR suggests the following locations are potential AFFF areas:

- Former Building 17 (Original Fire Station; **Figure 2**): This building was identified as the original fire station.
- Former Building 32 (Base Supply Warehouse; **Figure 2**): Facility stored fire suppressant chemicals contained in 55-gallon drums prior to distribution to other locations.
- Former Building 35 (Fuel Cell Repair Shop Satellite Accumulation Point; **Figure 2**): Facility generated hazardous waste, including anti-explosion foam saturated with JP-4.
- Former Building 56 (Vehicle Operations Heated Parking Facility Covered Storage; Figure 2): A spill of 8 to 10 gallons of a foam/water mixture was reported on August 1, 1994 on the west side of this building due to a P-2 mechanical malfunction in a turret system that was contained and cleaned using sorbent pads (SPL-56).
- Former Building 57 (Base Warehouse Supply; **Figure 2**): Facility stored leftover stock from Building 63 (Fire Station) after 1995, which may have included AFFF.
- Former Building 63 (Fire Station; **Figure 2**): The facility contained a 1,000 gallon AFFF AST and a 6,000 gallon AFFF AST, as well as two oil water separators (OWSs); OWS 63A and OWS 63B. Three AFFF spills were documented at this location; 45 ounces of 3% AFFF concentrate were spilled from the foam trailer on 21 August 1994, and subsequently recovered for reuse and placed in a 55-gallon drum (SPL-63-4); 40 ounces of AFFF leaked from a foam trailer on 30 September 1994, and subsequently cleaned with absorbent pads (SPL-63-5); and, 10 gallons of AFFF were spilled from a foam pump on 28 November 1994, and subsequently washed into the OWS (SPL-63-6).
- SPL-2501-49 (**Figure 2**): A spill of 45 gallons of AFFF/water mixture was reported on 16 July 1994 south of the flightline apron, but was reportedly recovered.
- Former Drum Accumulation Area (OTH-2531-2; **Figure 2**): Area was located within the Aircraft Washrack Pad (OTH-2531-1) where hazardous waste from hangar operations were stored on an

outside concrete wash rack area north of Buildings 19 and 30, near Building 20. The wash rack was located over a drain grate that discharged to the surface drainage system or sanitary system.

4.2.2 BRAC Document Repository Review

Research was initially conducted of the BRAC DR based on an index of documents for each installation. No DR Environmental Reports (ER) were requested for the former O'Hare ARS; however, AFCEC subsequently conducted a keyword search of the BRAC DR/ER reports using the following words and word combinations: "AFFF," "aqueous film forming foam," "crash," "wash racks," "perfluorinated," and "PFC." A total of 26 documents were provided by AFCEC for further review. **Table 3** summarizes the six relevant documents identified during the search and subsequently reviewed. Additional supporting information, including the document Research Logs, is located in **Appendix D**.

Table 3: Summary of Relevant Reports from the BRAC Document Repository

DR/ER Document Number	Document	Date	Relevance	
11-B	Draft Pollution Prevention Assessment and feasibility Report Land Exchange Agreement		Provided information pertaining to AFFF tanks at Building 63.	
315918			Provided a listing of buildings, deed descriptions, and relevant maps.	
316714	Operating Agreement Between United States and City of Chicago	August 1998	Provided additional information concerning AFFF at Building 63 and building numbers with dates of construction.	
317262	Property Categorization Summary	October 1998	Summarized investigations completed at Building 81, Apron 2501, Building 17, Building 55, and wash rack 2531.	
317263	317263 USAF Real Property Inventory Detail List		Provided information pertaining to an AFFF sprinkler system in Building 43.	
317624 AF Form 1441 and DD1354		June 1999	Documents pertaining to transfer of the former station.	

<u>DR/ER Document Number 11-B (Jaycor, 1993)</u>: The document stated that a 16 September 1993 audit identified a 600 gallon steel tank and a 375 steel tank for AFFF located at Building 63.

<u>DR/ER Document Number 315918 (USAF, 1989)</u>: The document provided information on the building numbers and names, deed descriptions, supplemental agreement executed in 1994, and pertinent maps.

<u>DR/ER Document Number 316714 (USAF, 1998)</u>: The document identified the AFFF at Building 63 and at spills SPL-56, SPL-63-5 and SPL-63-6, as 2-butoxyethoxy ethanol (diethylene glycol monobutyl ether). The document also described the City of Chicago's use of Building 63 (Fire Station) after departure of the USAF.

<u>DR/ER Document Number 317262 (USAF, 1998)</u>: The document summarized the investigations that have been completed, and provided a summary of investigations at Building 81, Apron 2501, Building 17, Building 55, and wash rack 2531.

<u>DR/ER Document Number 317263 (USAF, 1999)</u>: The list indicated an AFFF PA sprinkler system (Code 880217) was installed in Building 43 in 1993, and a foam system was installed in Building 2917 in 1993

<u>DR/ER Document Number 317624 (USAF, 1999)</u>: The document listed an AFFF sprinkler system (Code 880217) in Building 81.

Review of relevant information from the BRAC DR suggests the following locations are potential AFFF areas:

- Former Building 43 (Hangar; **Figure 2**): Facility maintained an AFFF sprinkler system installed in 1993.
- Former Building 63 (Fire Station; **Figure 2**): Facility contained a 600 gallon and 375 gallon steel tank for AFFF storage, and spills SPL-56, SPL-63-5, and SPL-63-6 occurred at this building involving AFFF.
- Former Building 81 (928th Supply Warehouse; **Figure 2**): Facility maintained an AFFF sprinkler system installed in 1993.
- Former Building 2917 (Liquid Fuel Fill Stand): Facility maintained a foam system installed in 1993;
 however, the location could not be verified.

4.2.3 Internet/News Review

A general search of the internet was conducted utilizing the following keywords: "Fire O'Hare," "Crash O'Hare," "Plane Crash O'Hare," "Plane Mishap O'Hare," "Accident O'Hare," "Aqueous Foam O'Hare," and "AFFF O'Hare." A summary of relevant documents/websites is listed in **Table 4** and the associated research logs and supplemental information is included in **Appendix D**.

Table 4: Summary of Relevant Websites

Website and URL	Description	Relevance
Global Security website: http://www.globalsecurity.org/military/facility/ohare.htm	Global Security website for O'Hare ARS	Provided information on the decommissioning of O'Hare ARS as part of BRAC-95.
The official website of the 126 th Air Refueling Wing: http.www.126arw.ang.af.mil/resources/factsheets /factsheet.asp?id=13130	Factsheets website for the 126th ARW	Provided a history of the 126th ARW.

No relevant documents or websites pertaining to AFFF was found during the internet/news review search.

4.2.4 Air Force Historical Research Agency, Maxwell AFB, AL

The online AFHRA Records Index was searched for the following keywords: "crash," "fire," "mishap," "AFFF," "aqueous film forming foam," "as-built," and "real property." No documents were identified through the AFHRA Records Index using the keywords. Amec Foster Wheeler did not conduct a file review

at AFHRA at Maxwell AFB in Montgomery, Alabama since no documents were identified during the AFHRA Records Index search.

4.2.5 Air Force Safety Center at Kirtland AFB, Albuquerque, NM

Colonel Jeffrey Slagle, AFSEC Staff Judge Advocate, conducted a search within the Air Force Safety Automated System (AFSAS) and legacy safety records using the following words and word combinations: "foam;" "foam fire;" "foam crash;" "perfluorinated;" and, "PFC." No records were identified for O'Hare ARS.

4.2.6 Additional Documents

Four additional documents with relevant information for former O'Hare ARS were identified, subsequently logged, and are summarized below. **Table 5** summarizes the documents, while additional supporting information, including the document Research Logs, is located in **Appendix D**.

Table 5: Summary of Additional Documents

Document	Date	Relevance
O'Hare Transfer Documents for Parcel 3	November 1999	Provided a list of personal property, including AFFF, at Building 55 and Building 81.
Demolition of Surplus Strutures Associated with the Former O'Hare ARFF	March 2002	Provided a list of buildings to be demolished and station history.
United States Geological Survey-National Water Quality Assessment Program website: http://il.water.usgs.gov/nawqa/uirb/description/geology.html	Visited 6/8/2015	Provided additional information of site soils, geology, and physiology.
Chicago Department of Aviation – O'Hare Modernization Program	Visited 8/25/2015	Provided information pertaining to the OMP activities and presents maps showing the new runway realignment and new ancillary buildings.

Several documents or websites pertaining to AFFF were found during the additional document review and included the following:

- Building 55 (Base Pavement and Grounds Facility; **Figure 2**): Facility stored 5 barrels of AFFF prior to base transfer in 1999, according to the O'Hare Transfer Documents for Parcel 3.
- Building 81 (928th Supply Warehouse; **Figure 2**): Facility maintained an AFFF sprinkler system prior to base transfer in 1999, according to the O'Hare Transfer Documents for Parcel 3.

4.3 Data Quality

As discussed in Section 1, the goal of the PFC research is to identify potential AFFF areas where PFCs may be present as a result of the use of AFFF during firefighting activities, emergency responses, fire suppression system testing or releases, or any other activities conducted at the installation. In order to ensure that research activities were conducted sufficiently to fulfill these project objectives, a PFC

as used as a data quality tool which summarizes the research activities discussed The completed PFC Research Checklist is included in Appendix E .	in

5.0 SUMMARY AND CONCLUSIONS

The information obtained during the research was evaluated to determine which areas at the former O'Hare ARS potentially stored, handled, or used AFFF. The AFFF areas were classified as either: storage areas; handling areas; or, usage/release areas, which are defined below.

Storage Area: An area where AFFF was stored in bulk. Storage containers/areas contained:

- Virgin AFFF for use; and,
- Spent AFFF/water mixture.

Handling Area: An area where AFFF was transferred from or to storage either manually or by pipeline.

Usage/Release Area: An area where AFFF was discharged intentionally or unintentionally, including instances when:

- AFFF was discharged intentionally (fire training exercises or equipment testing);
- AFFF was released unintentionally (e.g. discharge from fire suppression system); and,
- AFFF was released through transport mechanisms (overland flow to surface water bodies).

AFFF areas may include:

- crash sites/aircraft fires;
- FTAs used after 1970;
- areas with USTs, ASTs, drums, buckets, etc. where virgin or spent AFFF was stored with or without secondary containment;
- areas where AFFF use or release was documented via personnel interviews, environmental reports, electronic or print media, etc.; and,
- areas where AFFF was handled, used/released indoors.

Based on the research conducted on the use of AFFF at the former O'Hare ARS, 12 potential AFFF areas were identified; however, all of the identified buildings no longer exist and major redevelopment of the former O'Hare ARS is ongoing under the OMP, which includes a realignment of the runways and a new western terminal campus. **Table 6** summarizes the potential AFFF areas and potential media/receptors identified during the research, and **Figure 3** illustrates their locations.

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Table 6: Summary of Potential AFFF Areas and Justification for Potential Future Action

AFFF Area No.	Potential AFFF Area	Area Type	Date	Drainage System/ Receiving Water Body	Downgradient Drinking Water Wells	Potentially Affected Media	Justification for Potential Future Action
1	Former Building 17 (Band Center - Original Fire Station)	Storage/ Handling	1961-1980	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility stored five-gallon buckets of AFFF for use in Air Reserve Forces Facility (ARFF) trucks; however, no AFFF releases were documented.
2	Former Building 32 (Base Supply Warehouse)	Storage/ Handling	1963-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility stored 55-gallon drums of AFFF in an outside fenced storage area and inside the building; however, no AFFF releases were documented.
3	Former Building 35 (Fuel Cell Repair Shop - Satellite Accumulation Point)	Storage/ Handling	1975-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility stored anti-explosion foam; however, no AFFF releases were documented.
4	Former Building 43 (Hangar)	Storage/ Handling	1993-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility maintained an AFFF fire suppression system from 1993 through base closure, and AFFF may have been released during initial system testing.
5	Former Building 55 (Base Pavement and Grounds Facility)	Storage/ Handling	1980-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility stored five barrels of AFFF as noted during a 1999 personal property inventory conducted prior to transfer of the former base to the city of Chicago in July 1999.
6	Former Building 56 (Vehicle Operations Heated Parking Facility - Covered Storage)	Release	1 August 1994	Storm drainage to Willow Creek	None*	Soil and groundwater	Eight to ten gallons of foam/water mixture were spilled on the west side of the building on 1 August 1994, which was reportedly contained and cleaned with absorbent materials (SPL-56).
7	Former Building 57 (Base Warehouse Supply)	Storage/ Handling	1978-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility stored leftover stock from Building 63 (Fire Station), which may have included AFFF.
8	Former Building 63 (Fire Station)	Storage/ Handling, Usage/ Release	1980-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility contained a 1,000 gallon AFFF AST, a 6,000 gallon AFFF AST, a 375 gallon steel AFFF tank, a 600 gallon steel AFFF tank, and a foam trailer, and four ARFF trucks were stored and washed inside and outside of this building. Three spills of AFFF were documented at this facility in 1994.

AFFF Area No.	Potential AFFF Area	Area Type	Date	Drainage System/ Receiving Water Body	Downgradient Drinking Water Wells	Potentially Affected Media	Justification for Potential Future Action
9	Former Building 81 (928th Supply Warehouse)	Storage/ Handling	1992-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility maintained an AFFF fire suppression system from 1992 through base closure, and AFFF may have been released during initial system testing.
10	Former Building 2917 (Liquid Fuel Fill Stand)	Storage/ Handling	1993-1999	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility maintained a foam fire suppression system from 1993 through base closure, and AFFF may have been released during initial system testing.
11	Flightline Apron (SPL-2501-49)	Release	16 July 1994	Storm drainage to Willow Creek	None*	Soil and groundwater	45 gallons of AFFF/water mixture were spilled south of the flightline parking area on 16 July 1994, and reportedly recovered.
12	Former Drum Accumulation Area (OTH-2531-2)	Storage/ Handling	Mid 1980s to early 1990s	Storm drainage to Willow Creek	None*	Soil and groundwater	Facility temporarily stored AFFF during construction/renovation activities conducted at the former base from approximately the mid-1980s through the early 1990s.

^{*} Groundwater use in the city of Chicago and surrounding area is prohibited.

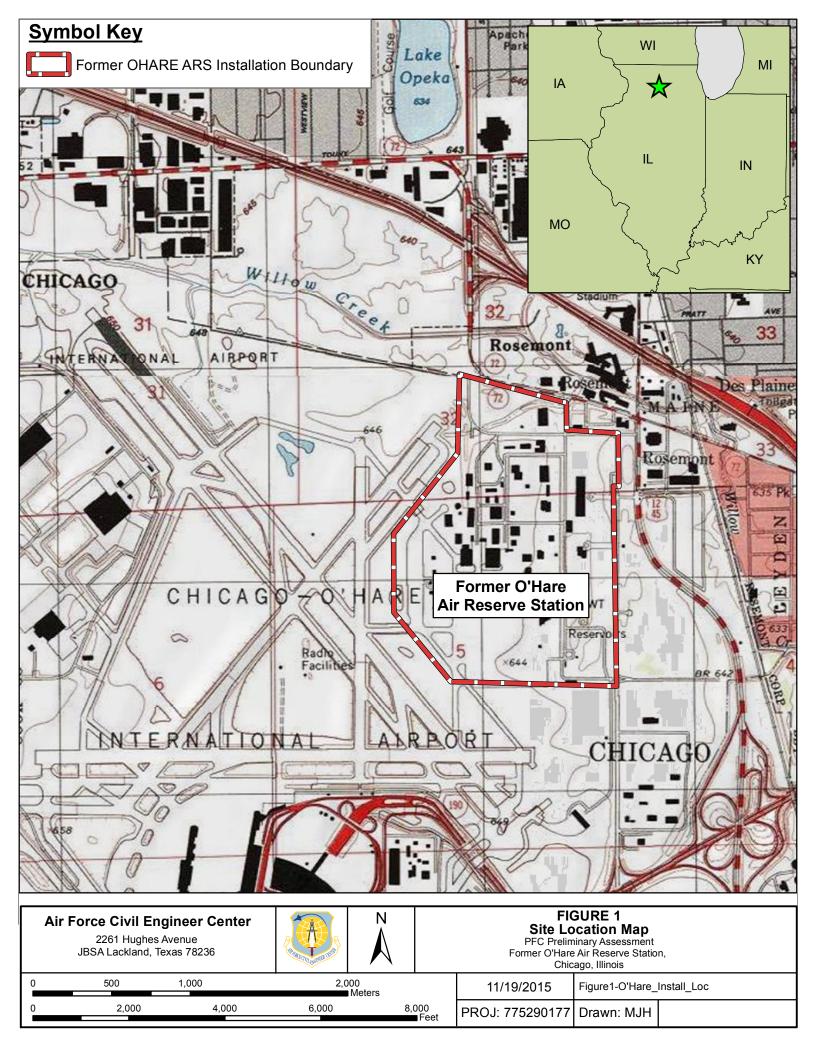
6.0 REFERENCES

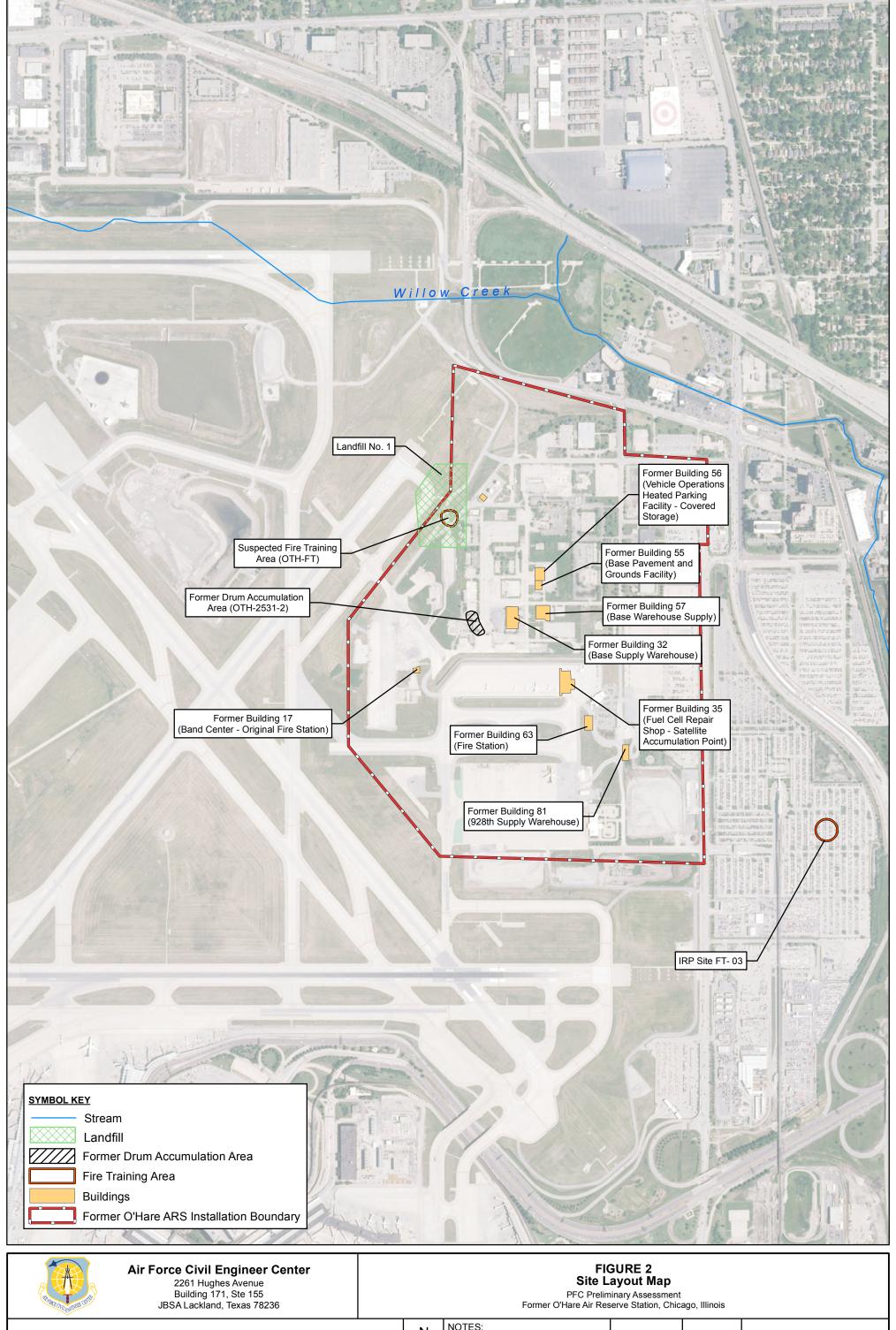
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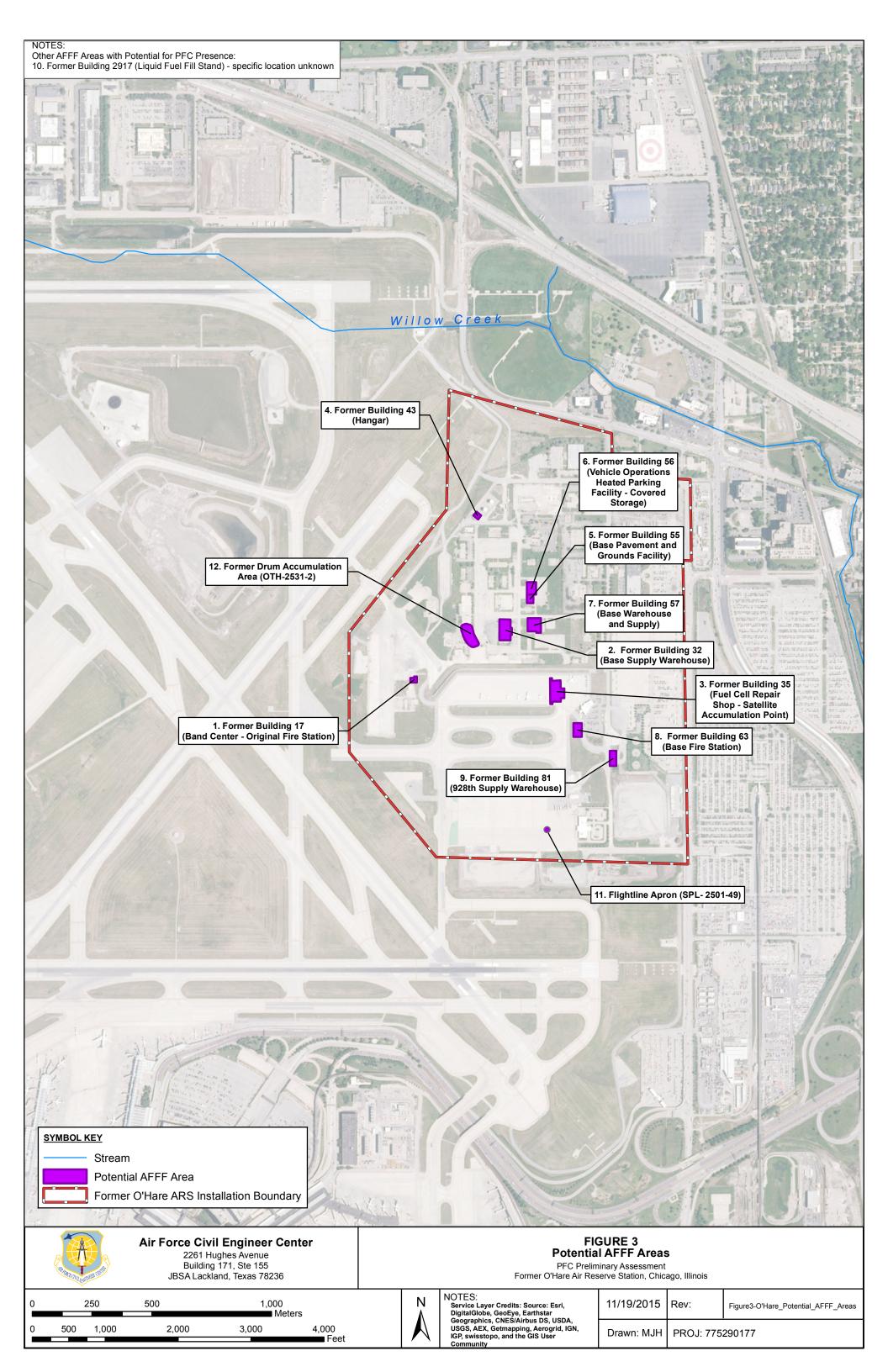
FIGURES

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NOTES: Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Ν 0 250 500 1,000 12/16/2015 Rev: Figure2-O'Hare Site Layout Meters 500 1,000 2,000 3,000 4,000 Drawn: MJH PROJ: 775290177 ■ Feet Community



APPEND	DIX A
SUPPLEMENTAL INFORMATION ON AFF	F USE AFTER INSTALLATION CLOSURE

Supplemental Information on AFFF use after Installation Closure

Mr. Dennis Claxton, Civilian – Assistant Fire Chief at O'Hare ARS, was interviewed regarding the use of AFFF after closure of O'Hare ARS. The telephone interview was conducted by Martha Shirley of Amec Foster Wheeler on June 5 and June 8, 2015. The questions and associated responses are summarized below.

1. Question: Are there AFFF systems today? <u>Unknown</u>

Response: The only building left on the base is Building 4, which is an administrative building.

2. Question: Are these new or AF vintage? NA

Response: <u>Does not know if AFFF is used on site today</u>.

3. Question: Is AFFF used today? <u>Unknown</u>

Response: <u>Does not know if AFFF is used on site today.</u>

4. Question: Is product left over from Air Force Inventory? <u>Unknown</u>

Response: Does not know if AFFF is used on site today.

APPENDIX B

PFC GENERAL QUESTIONNAIRE



General PFC Information Questionnaire



		O'Hare ARS, IL
BEC (ı	name and phone)	non-responsive
ВЕС р	referred contact method (phone, e-mail)	both
Installa	ation support staff (name and phone)	none
List of	potential interviewees and contact information	none we know
	General Installation Information	Comment
1.	In what years was the installation operational?	closed in 1995
2.	Please briefly describe installation mission.	Air Reserve Station, last mission was Refueling
3.	Current property owner/land use	City of Chicago, O'Hare International Airport
4.	List FTAs	OTH-FT was a "suspected FTA"
5.	List hangars with fire suppression systems	not sure
6.	Are there known spill/crash sites at the base where AFFF could have been used?	no records of fires or other incidents
7.	Was AFFF stored and/or disposed at the installation?	probably
8.	Was there an on-base fire station?	not sure
9.	Was there a truck washing station/area at the base?	not sure
10.	Is there a Federal Facilities Agreement in place?	no
11.	Are there specific relevant documents available (include AR document number if possible)?	AR is available
12.	Are relevant as-builts available?	not likely
13.	Are Historic Maps of the Installation available? Specifically with Building Numbers/Function?	limited
14.	Are Shape files of the Installations available?	not many
15.	Are Accident and/or Fire Reports available?	no
16.	Is there a nearby drainage system or body of water that may have received AFFF?	not likely
17.	Additional comments?	

APPENDIX C

TELEPHONE LOGS



Telephone Interview Log



Date:	May 21, 2015	Installation:	Former O'Hare ARS - Ch	icago, IL
Name:	David Strainge	Position/Rank:	BRAC Environmental Co	ordinator
Contac	t Information (phone, e-mail):	non-responsive		
Years a	at or familiar with Installation (# and	dates):		
Was Ad	queous Film Forming Foam (AFFF	used/stored on-base outside of Fire Tra	aining Areas (FTAs)?	Did not know
	If so, where? NA			
Were th	nere hangars on-base with fire sup	ression systems? <u>Did not know</u>		
	If yes, was AFFF used in these	vstems? N/A		
Was the	ere a fire station on-base?	Not sure		
	If yes, where was it located?	NA		
	If no, what local fire station was o	call for emergencies? NA		
Were th	nere any planes crashes or fires or lf so, where were they located?			
Was the	ere a truck washing area for fire tr	cks or emergency vehicles on-base?	Did not know	
	If yes, where was it located?	NA		
Was the		ion and testing of fire fighting equipmen	nt that may have contained	AFFF? <u>Unknown</u>
	If yes, where was it located?	NA		
Is there	an additional contact that could p	ovide information of AFFF (name and c	ontact info)?	None that they know of.
Δdditio	nal Comments:			
Addition	ai comments.			
Intervie	wer: Mike Washburn	Date: May 2	2015	



Interviewer: Martha Shirley

Telephone Interview Log



Perfluorinated Compounds (PFCs) Release Determination, Delineation, and Remediation at Multiple BRAC Bases, Contract FA8903-08-8766, Task Order 0177

Date:	June 5 and 8, 2015			installation:	Former O Hare ARS - Unicago	, IL
Name:	Dennis Claxton			Position/Rank:	Assistant Fire Chief, O'Hare Al	RS
Contact	t Information (phone, e-	-mail):	non-responsive			
Years a	at or familiar with Installa	ation (# and	d dates): <u>197</u>	74 - 1 July 1997		
\\\oo \ o	vuonna Eilea Formina E	/ ^	`\	has sutside of Fire Tra	ining Areas (FTAs)2	
was Ac				-base outside of Fire Tra		
	If so, where?			<u> </u>	ept in Building 17 (original Fire S	-
			·		sed until Bldg. 63 was constructe	•
				•	storage), then inside when realize	
					gs 19 and 30 during construction	renovation in late 1960s to
		earry 1990	Os for short perio	d of time.		
Were th	nere hangars on-base v	vith fire sup	pression system	s? None of the han	gars had AFFF as far as he reme	embers, only water
	If yes, was AFFF use	d in these s	systems? NA			
Was the	ere a fire station on-bas	se?	Yes			
	If yes, where was it loo	cated?	Building 406 (A	ANG Fire Station), Buildir	ng 17 and Building 63.	
	If no, what local fire st	ation was o	on call for emerge	encies? Buildings als	o used by City of Chicago under	a joint use agreement.
	Building 63 used only	by City of C	Chicago for appro	ox. one year after BRAC	and then torn down. No other cra	ash fire stations on base.
	The extra bay built at	the Fire Sta	ation (Building 63	3) was used for wash rac	k, office, and training area. Appr	ox. 4 ARFF trucks.
Were th	nere any planes crashe	s or fires or	n base? No	ne on the military side. I	le stated that he did not rememb	er any spills of AFFF.
	If so, where were they		NA			<u>or any opinio or an an an</u>
	n co, micro more ano	y locatou.	10.0			
Was the	ere a truck washing are	a for fire tru	ucks or emergen	cy vehicles on-base?	Yes	
	If yes, where was it loo	cated?	Building 17 (O	riginal Fire Station) - outs	side since there was no room insi	ide. Building 63 (current
			Fire Station) in	SW wash bay that had a	a drain and OWS.	
Was the	ere an area used for an	nual calibra	ation and testing	of fire fighting equipmen	t that may have contained AFFF	? Yes
			<u> </u>		base owned by City of Chicago (
	, ,				gins Road. He said the FTA was	
				ear the former pit.	<u>, , , , , , , , , , , , , , , , , , , </u>	
ls there	an additional contact t	hat could p	-	on of AFFF (name and co	ntact info)?	
		•		ber if there were ASTs a	·	
						
Addition	nal Comments:	He stated	that the only bui	lding left on the former b	ase is Building 4 (admin.). Buildi	ing 406 (former ANG
	Fire Sta.) was only use	ed for perso	onal gear, no bul	k storage. He said Buildi	ng 406 was virtually only a garag	je; however, no ARFF
	trucks were stored the	ere. They d	lid have ARFF tr	ucks at Building 17 and E	Building 63. He stated that during	g the build up in the
	mid-1980s everything	was move	d in closer and b	ulk AFFF was moved to	Building 32.	

Date: _____June 8, 2015



Telephone Interview Log



Date:	June 4, 2015			Installation	on:	Former O'Hare ARS - Chicago, IL
Name:	Bob Meade			Position/Rai	nk:	Chief Master Sergeant/Reserve Fire Chief and City
				_		of Chicago Training Officer, Airport Division
Contac	t Information (phone,	e-mail):		non-responsive		
V			-1 -1-4	4000 4007 (0111 45	DO):	4000 0004 (City of Obicana)
years a	at or familiar with Insta	allation (# and	d dates):	1980 - 1997 (O'Hare Ar	KS);	1990-2001 (City of Chicago)
Was Ad	queous Film Forming	Foam (AFFF) used/stor	ed on-base outside of Fire	e Tra	aining Areas (FTAs)? Yes
	If so, where?	Fire Statio	n - Buildin	g 63: approx. 1,000 gallon	n proj	pylene plastic AST of AFFF and small foam trailer.
		AFFF stor	ed at forme	er Fire Station (Building 17	7) in	5 gallon buckets (Bldg. close to Runway 22R/west of
		hangars).	Also, store	d in 4 ARFF crash fire vel	hicle	s.
Were th	nere hangars on-base	with fire sup	pression s	ystems? He does not	t kno	w which ones, but feels sure some of them did.
	If yes, was AFFF us	sed in these s	systems?	Very likely		
Mac th	ere a fire station on-b	2002	Yes			
was ur	If yes, where was it I			S3 and the former Fire Sta	ation	at Building 17 up until Building 63 was built.
	If no, what local fire					go used Fire Station 63 as well. He stated that ANG
126th						Reserve Station other than the mentioned Fire Stations.
12001 6	and All Neserve 9200	1 CO-EXISTECT	on base. I	ie did flot kilow of arry ora	23111	reserve Station other than the mentioned rife Stations.
Were th	nere any planes crash	es or fires or	n base?	Not that he recalls		
	If so, where were th	ey located?	N/A			
\		for fire to			2	Vec
was th	_			ergency vehicles on-base		Yes
	If yes, where was it l	ocated?	Truck wa	sning occurrea inside Buil	iaing	63. There was an OWS in Fire Station.
Was the	ere an area used for a	annual calibra	ation and te	esting of fire fighting equip	men	t that may have contained AFFF? No
	If yes, where was it	ocated?	They did	not spray ARFF trucks to	calib	orate; only used a few drops and a refractometer.
			He stated	that AFFF was too exper	nsive	e to waste.
Is there		•		rmation of AFFF (name ar		•
	former Civilian Assis	tant Fire Chi	et, Dennis	Claxton, and ask him to ca	all m	e. Mr. Claxton is retired.
Additio	nal Comments:	STOR-63	may have	been the extra stall added	d onto	o the Fire Department (Building 63). He does not
	remember an outsid	e storage are	ea. The fire	training pit was located o	n Cit	ty of Chicago property the whole time he was there.
	It was between runw	/ays 36/18 ar	nd 14L nea	r its current location. In 19	994.	a new pit was dug and they went to propane.
					,	, , , , , , , , , , , , , , , , , , , ,
Intonvio	wer: Martha Shirley			Data: lur	20.4	2015



Telephone Interview Log



Date:	June 4, 2015	Installation: Former O'Hare ARS - Chicago, IL
Name:	Lieutenant Wagner	Position/Rank: Live Fire Training Specialist, City of Chicago
Contac	et Information (phone, e-mail):	non-responsive
Years a	at or familiar with Installation (# and	d dates): 1988 - present
Was A	queous Film Forming Foam (AFFF) used/stored on-base outside of Fire Training Areas (FTAs)? yes
	If so, where? Fire Station	n
Were tl	here hangars on-base with fire sup	pression systems? He does not know.
	If yes, was AFFF used in these s	systems? N/A
Was th	ere a fire station on-base?	Yes
	If yes, where was it located?	He does not know the Building No., but indicated it was taken down long ago.
	If no, what local fire station was o	n call for emergencies?
Were tl	here any planes crashes or fires or	base? None that he remembers.
	If so, where were they located?	N/A
Was th	ere a truck washing area for fire tru	ucks or emergency vehicles on-base? Yes
	If yes, where was it located?	He stated they would have washed the vehicles in the Fire Station. He remembers that there
		was a floor drain that went to an OWS. He stated they likely washed on the pavement outside
		the Fire Station during good weather.
Was th	ere an area used for annual calibra	ation and testing of fire fighting equipment that may have contained AFFF? Yes
	If yes, where was it located?	He does not know where they calibrated their ARFF trucks. He stated that they had 3-4
		ARFF crash fire vehicles at the former base Fire Station. He said the City of Chicago is required
		to test their ARFF trucks once a year.
Is there	e an additional contact that could p	rovide information of AFFF (name and contact info)? He stated that he would get
	in touch with his friend, the Chief	Master Sargent at the former O'Hare ARS, and see if he would be willing to call me; he was
	not willing to give out his phone r	umber. He stated that he has been around for 30 years and all the guys he knows have retired.
Additio	nal Comments: He indicat	ed that the Fire Station was operated by Civilians during the week & reservists on the weekend.
	He stated that their fire training a	rea was located in a remote area near the NW corner of the airfield. He indicated there was
	only one Fire Station on the form	er base during his time. After BRAC, the Fire Station was used by the City of Chicago for less
	than a year & then eventually toru	n down due to lack of funding. They did not store AFFF when it was used by the City of Chicago.
Intervie	ewer: Martha Shirley	Date: June 3, 2015

APPENDIX D

RESEARCH LOGS





Date:	6/4/2015	5	Installati	on: <u>O'Har</u>	e ARS - Chi	cago, I	L
Researcher:	Martha	Shirley					
Type of resear	rch:	Online	e - BRAC AR e - General Engine Sea CDR/ER	rch	A	F Safe	orical Research Agency ty Center ocument Review
Document Nar	ne:	AR03 - IRP Pł	nase I - Records Search	O'Hare /	Air Reserve I	Forces	Facility, Illinois
Document Aut	hor:	Engineering-S	cience				
Document Dat	e:	December 198	33				
Was copy of tit	tle page o	btained?:	X Yes				No (provide reason)
Notes: Search	hed key w	ords "crash," "f	fire," "accident," "misha	o," "AFFF	," "foam," an	ıd "was	sh rack."
Fire Protection	Training	Area -operated	d 1955 to early 1960s. C	onducted	l geophysica	ıl surve	y around site to id
potential leach	ate plume) .					
Fire Departme	nt - Buildi	ng 63					
From approx.	1946 to 19	955 contractor	collected combustible w	aste and	remove ther	n from	installation. From 1955
to 1979, waste	was burn	ned at the Fire I	Protection Training Area	a. Now w	aste are drui	mmed	and disposed offsite.
Sometimes wa	ste were	disposed in two	o landfills on base until	1970 whe	n landfill ope	erations	s ceased.
Since 1955, fir	e protection	on training has	occurred at 3 locations	, only one	of which is	on bas	e property. From 1955
to early 60s fire	e training	was on the SE	side of the base and th	e burn pit	was constru	ıced wi	ith an earth berm and
soil bottom; sit	e is now o	covered by hard	dfill. From early 1960s	o presen	t day, the fire	e trainir	ng at two sites on
O'Hare Interna	tional Airp	oort property ur	nder a joint agreement -	one was	located nort	h of Hi	ggins Road, the current
one is located	approx 1	mile south of th	ne second site.				
Fire Protection	Training	Area from 195	5 to early 1960s SE of F	larper Dri	ive and Old I	Mannhe	eim Road (operator
O'Hare ARFF.							

File: 17G D.F.



O'HARE IAP ARS ILLINOIS

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 03

3

INSTALLATION RESTORATION PROGRAM

PHASE I - RECORDS SEARCH

O'HARE AIR RESERVE FORCES FACILITY, ILLINOIS

PREPARED FOR

UNITED STATES AIR FORCE
HEADQUARTERS
AIR FORCE RESERVE
Robins Air Force Base, Georgia



DECEMBER 1983





Date:	6/1/201	Installation: O'Hare ARS - Chicago, IL									
Researcher:	Martha	Shirley				<u>-</u>					
Type of resear	rch:			AR al Engine S	Search			AF Sa	fety Cer		h Agency ew
Document Na	me:	AR08 - Final En	vironme	ntal Impa	ct State	ment Ch	hicago C)'Hare I	nternatio	onal Airp	oort, Vol.1
Document Aut	thor:	U.S. Departmen	nt of Tran	nsportatio	n						
Document Dat	te:	5/1/1984									
Was copy of ti	tle page o	btained?:	Х	Yes					No (p	rovide re	eason)
Notes: Searc	hed key w	ords "crash," "fir	e," "acci	dent," "mi	shap," '	"AFFF,"	"foam,"	and "wa	ash rack	(. "	
The main cras	sh, fire, an	d rescue (CFR) f	acility th	at is locate	ed adj t	o Conco	ourse B	will requ	ıire dem	nolition d	lue to
relocated taxiv	vay. CFR	facility will be re	located i	n '85 to pr	roposed	d cargo/f	freight fo	rwarde	r facility	W of Ru	unway 32L
and south of R	Runway er	id 9R. CFR #2 w	∕ill also r	equire rel	ocation	- it is cu	rrently l	ocated	west of	Runway	14L
and will be relo	ocated so	uth of new cargo	complex	to meet	emerge	ncy veh	icle trav	el time	criteria.		
Notes that the	Fire Train	ing Pit site is a jo	oint use	facility use	ed by th	ne City o	f Chicag	o and t	he AF -	noted as	s being
located east o	f Runway	end 14L.									

8

...()

File: 17G D.F.



O'HARE IAP ARS ILLINOIS

ADMINISTRATIVE RECORD COVER SHEET

AR File Number __ O8__



Final 8 1 D.F. 170 Environmental Impact Statement

Chicago O'Hare International Airport Chicago, Illinois

This statement is submitted for review pursuant to the requirements of Section 102(2) (C) of the National Environmental Policy Act of 1969 (P.L. 91-190), 42 U.S.C. 43210, Section 4(f) of the Department of Transportation Act of 1966 (P.L. 89-670 as amended by P.L. 90-495), and Title V of Public Law 97-248, the Airport and Airway Improvement Act of 1982 and other laws as applicable.

The City of Chicago has submitted an Airport Layout Plan to the Federal Aviation Administration for approval. The Plan shows the construction of a new United Airlines terminal; a new international, commuter, and general aviation complex; a new air cargo area; minor runway extensions; roadway improvements; and miscellaneous other development.

Department of Transportation Federal Aviation Administration Great Lakes Region Airports Division 2300 E. Devon Avenue Des Plaines, Illinois 60018 For Further Information: Michael C. Rose (312)694-7538 Airports Planner

May, 1984

Volume One of Two





Date: 6/1/2015 Instal	Installation: O'Hare ARS - Chicago, IL				
Researcher: Martha Shirley					
Type of research: X Online - BRAC AR	AF Historical Research Agency				
Online - General Engine S	Search AF Safety Center				
BRAC DR/ER	Misc. Document Review				
Document Name: AR120 - Phase I Environmental Ba	aseline Survey (EBS) O'Hare ARFF - Rev. 2				
Document Author: HARZA Consulting Engineers and	Scientist				
Document Date: <u>1/1/1997</u>					
Was copy of title page obtained?: X Yes	No (provide reason)				
Notes: Searched key words "crash," "fire," "accident," "mis	shap," "AFFF," "foam," and "wash rack."				
Study Area 11 - Facility No. 63 - Base Fire Station (built 198	80) - storage areas STOR-63 - AST AFFF-1. Also,				
OWS 63A and 63B and SPL 63-1 through SPL 63-8. Large	quantities of AFFF were stored here but not used in				
this facility. After May 1995, stored material were considered	ed "bench stock" and kept for a minimal amount of time.				
Unused portions are returned to the Pharmacy Building 57.					
AST-AFFF-1 - active - year installed "NA" - 1,000 gal and o	ne 6,000 gal AFFF ASTs: no contamination observed				
during the February 1996 site inspection.					
SPL-2501-49 - Study area 10 - AFFF spill on 7/16/1994: 45	gallons of AFFF/water mixture south of the parking				
area on the flightline. R-4 crew accidently discharged AFFI	-/water mixture. Spill was recovered.				
SPL-63-4 - Study area 11 - AFFF spill on 8/21/94: 3% AFFF	concentrate - 45 ounces at Building 63 from the foam				
trailer. The product was recovered for reuse and placed in					
SPL-63-5 - Study area 11 - AFFF spill on 9/30/94: 40 ounc	es at Building 63 from foam trailer that was leaking.				
Spill cleaned up with absorbant pads.	· ·				
SPL-63-6 - Study area 11 - AFFF spill on 11/28/94: 10 gallo	on at Building 63 from foam pump. This spill was				
washed into the OWS.					
STW-35 - Study area 10 - 928th MXS/MAFAF, Fuel Cell Re	epair Shop-Satellite Accumulation Point (Building 35):				
Hazardous waste generated include anti-explosion foam sa	· · · · · · · · · · · · · · · · · · ·				





Date:	6/1/201	5	Insta	ıllation: O'Hare	e ARS - Chicago, IL
Researcher:	Martha	Shirley			
Type of resea	rch:	χ Onlin	e - BRAC AR		AF Historical Research Agency
		Onlin	e - General Engine S	Search	AF Safety Center
		BRA	C DR/ER		Misc. Document Review
Document Na	me:	AR120 - Phas	se I Environmental B	aseline Surve	y (EBS) O'Hare ARFF - Rev. 2
Document Au	thor:	HARZA Cons	sulting Engineers and	d Scientist	
Document Da	te:	1/1/1997			
Was copy of t	itle page o	obtained?:	X Yes		No (provide reason)
Notes: Searc	hed key v	words "crash,"	'fire," "accident," "mi	shap," "AFFF,	" "foam," and "wash rack."
SPL-56 - Stud	ly area 6 -	- Spill of Foam/	Water mixture on 8/	1/94 on west s	side of Building 56 due to P-2 mechanical
malfunction in	turret sys	stem. Approx.	8-10 gallons - the sp	ill was contain	ned and cleaned up using sorbent
materials.					
crash - no hits	<u> </u>				
Facility 2531 -	- Aircraft v	vash rack (con	structed 1962) and C	OTH-2531-1 ar	nd OTH-2531-2: Site of former hazardous
waste drum a	ccumulation	on point betwe	en Building 19 and 3	0 and adj to C	WSs Study area 10 - 4,884 SY - wash
water drains to	oward the	perimeter tren	ch drain, which is co	nnected to an	OWS.
OTH-2531-2:	Former H	azardous Was	te Drum Accumulatio	on Point. Haza	rdous waste from hangar operations
were accumul	ated on a	n outside conc	rete wash rack area	north of Buildi	ngs 19 and 30 near Building 20. The
wash rack wa	s located	over a drain gr	ate that discharged t	to the surface	drainage system or sanitary system -
concrete was	noted as	stained in 1983	3 Phase I. Former ac	ccumulation a	rea on large concrete pad.
Fire Rescue T	raining: \	west of landfill	area used for fire res	scue training.	1,000 gal of fuel were poured on ground
and set on fire	for each	training exerci	se - continued until a	approx 1970. S	Small plane is visible in this area in 1958:
located in Stu	dy area 2.	. West POL er	ected in 1951 had tw	vo large ASTs	
		the fire station.		-	
Building 406 I					



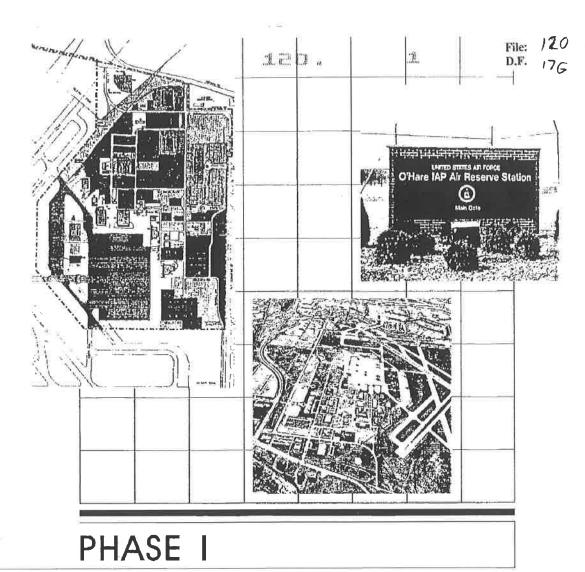


Date:	6/1/2015	5		Installation	n: <u>O'Hare</u>	ARS -	Chicag	jo, IL		
Researcher:	Martha	Shirley			_					
Type of resear	ch:	Online	e - BRAC AF e - General I CDR/ER	R Engine Seard	n		AF S	Safety Ce	Research enter ent Reviev	
Document Nan	ne:	AR120 - Phas	e I Environr	nental Baselir	e Survey	/ (EBS)	O'Hare	ARFF -	- Rev. 2	
Document Auth	hor:	HARZA Consi	ulting Engin	eers and Scie	ntist					
Document Date	e:	1/1/1997								
Was copy of tit	tle page o	btained?:	X	⁄es				No (provide rea	ason)
Notes: Search	hed key w	ords "crash," "	fire," "accide	ent," "mishap <u>,</u>	" "AFFF,"	' "foam,	," and " [,]	wash rad	ck."	
STM-32: Study	/ area 7: E	Base Warehous	se Supply (E	3uilding 32) - f	ire suppr	essant	chemic	als cont	ained in 55	5-gal.
drums stored h	nere befor	e being distribu	uted to the c	other shops. F	ire supp	ressant	chemi	cals were	e not used	here.
FT-03: Fire Pro	otection T	raining Area - S	SE side of b	ase and opera	ated from	approx	x. 1955	to the e	arly 1960s	
Consisted of cl	lay pit with	n earthen berm	and soil bo	ttom measuri	ng approx	x. 100'	in diam	eter - co	ntaminated	d fuels
(aviation gas a	nd autom	obile gas, was	e oil, kerose	ene, PD-680,	and hydr	aulic flu	uid) wer	e burne	d in pit. Ur	ıknown
if pit pre-soake	ed with wa	ter, how freque	ntly exercis	sed were cond	ucted, th	e quan	tity of m	naterials	used, or w	/hat
extinguishing a	agents we	re used. Site v	vas covered	with hard fill	consistin	g of co	nstructi	on debri	s and woo	d when
operation ceas	ed at FTA	A. Decision doc	ument in 19	990 and signe	d 1991 re	ecomme	ended r	no NFA.	Ownershi	p of site
was transferred	d in 1990	to City of Chica	ago for park	ing lot (ARFF	retains e	nvironr	nental ı	esponsi	bility).	
OTH-FT - Stud	dy area 2:	Suspected Fire	e Training <i>F</i>	rea - due to a	aerial pho	tograp	h - lateı	convert	ed to Land	lfill No 1
(IRP-LF-01). L	_andfill is	covered with so	oil and supp	orts vegetatio	n. PA, SI	, RI pe	rformed	- NFA	approved .	January
1997 under CE	RCLA/IR	P (approx. 5 ad	cres).							
Site history, ge	eology, wa	stewater, surfa	ce drainage	e, hydrology, t	hreatene	d and e	endang	ered spe	ecies.	
126th ANG Un	it and the	928th Tactical	Air Group.							



O'HARE IAP ARS ILLINOIS

ADMINISTRATIVE RECORD COVER SHEET



ENVIRONMENTAL BASELINE SURVEY (EBS) O'HARE AIR RESERVE FORCES FACILITY (ARFF) Chicago, Illinois

January 1997





Date:	6/2/201	5 Installation: O'Hare ARS - Chicago, IL
Researcher:	Martha	Shirley
Type of researd	ch:	X Online - BRAC AR AF Historical Research Agency Online - General Engine Search AF Safety Center BRAC DR/ER Misc. Document Review
Document Nan	ne:	AR922 - First Five-Year Review Report for the Former O'Hare ARS Chicago, Illinois
Document Auth	hor:	Booz Allen Hamilton Inc.
Document Date	e:	September 2007
Was copy of tit	tle page o	obtained?: X Yes No (provide reason)
Notes: Search	ned key v	vords "crash," "fire," "accident," "mishap," "AFFF," "foam," and "wash rack."
Spill - 3% AFFI	F concen	strate on 8/21/94 of 45 ounces at Building 63 that was recovered for reuse.
Spill - 40 oz. &	10.2 gall	lons of AFFF on 9/30/94 and 11/28/94 at Building 63 that was cleaned with adsorbent
material and wa	ashed int	to OWS, respectively.
Spill - Foam/wa	ater mixtu	ure on 7/16/94 of 45 gallon at Flightline Spot B-6.
Flightline Parki	ing area v	was cleaned but record does not indicate how.
Fire Protection	Training	Area (IRP-FT-003): ESA in 1986 as part of land transfer between City of Chicago and
USAF. Phase I	l 1983. P	rel Phase II 1984/1985. ESA in 1986. Prel SA/site inspection 1991/1992. Phase I EBS in
1996. RI in 199	98. Basev	wide ROD signed between September and November 2002 and Landfill 1 ROD signed in
September 200	05. Form	ner O'Hare ARS 274 acres.
Site manageme	ent includ	ded dividing site into 3 areas Parcel 1, Parcel 2/3A and Parcel 3. The Fire Protection
Training Area ((IRP-FT-(003) is located on adjacent property.
OTH-FT: Susp	pected Fo	ormer Fire Training Area in Parcel 3 identified from 1958 aerial photograph in which plane
was visible sou	uth of Lar	ndfill1. Reportedly, fire training was conducted here until 1970.
IRP-FT-003: ap	pprox. 19	55 to early 1960s. Clay pit with earthen berm and soil bottom approx. 100' in diameter.
Covered with h	nardfill an	d transferred to City of Chicago in 1990 - arsenic and beryllium in soil in this area.
OTH-2531-1: A	Aircraft W	ashrack Pad - Parcel 3: approx. 2500 SY washrack between Bldg 19 and 30 used for
cleaning and d	egreasin	g operations.OTH-2531-2: Former Drum Accumulation Area- area within Aircraft Washrack
Drums of haz v	waste froi	m hangars stored here.



O'HARE IAP ARS ILLINOIS

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 922



FINAL FIVE-YEAR REVIEW REPORT

First Five-Year Review Report for the Former O'Hare Air Reserve Station Chicago, Illinois

September 2007

Approved By:		Date:
KATHRYN M. HALVORSON		
Director, Air Force Real Property Agency	y	





Date: 6/8	3/2015	Insta	Installation: O'Hare ARS - Chicago, IL						
Researcher: M	artha Shirley								
Type of research:	ne - BRAC AR ne - General Engine \$ C DR/ER	Search	AF Safe	orical Research Agency ety Center ocument Review					
Document Name:	AR300619 - F	Final Second Five-Ye	ear Review Rep	ort for Former C)'Hare ARS				
Document Author:	FPM Remedia	ations, Inc.							
Document Date:	July 2013								
Was copy of title p	age obtained?:	X Yes			No (provide reason)				
Notes: Searched	key words "crash," '	"fire," "accident," "mi	shap," "AFFF,"	"foam," and "wa	ish rack."				
Provided additiona	I information on lan	d use, groundwater ι	use, surface wat	ter use.					
Also provided infor	mation on land tran	sfer and restrictive c	ovenants.						
-									



O'HARE IAP ARS ILLINOIS

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 300619

FINAL

SECOND FIVE-YEAR REVIEW REPORT

For

Former O'Hare Air Reserve Station Chicago, Illinois

Prepared for:



AIR FORCE CIVIL ENGINEER CENTER

Prepared by:

FPM Remediations, Inc.

584 Phoenix Drive Rome, NY 13441

July 2013





Date: 6/2/2015		Installation: O'Hare ARS - Chicago, IL						
Researcher:	Martha	Shirley			_			
Type of resear	rch:	Online	e - BRAC AR e - General En DR/ER	ngine Search	ı	AF	Historical Re Safety Cente sc. Document	
Document Nar	me:	ER-11B: Draft	Pollution Prev	vention Asse	essment	and Feasibil	ity Report	
Document Aut	hor:	Jaycor						
Document Dat	e:	10/27/1993						
Was copy of ti	tle page c	btained?:	X Yes	5			No (prov	vide reason)
Notes: Search	hed key w	vords "crash," "f	ire," "acciden	t," "mishap,"	"AFFF,"	"foam," and	"wash rack."	
A 9/16/93 audi	it indicate	d a 600 gallon s	steel tank and	a 375 gallor	n steel ta	ınk for AFFF	at Building 6	3.

DRAFT POLLUTION PREVENTION **ASSESSMENT** AND **FEASIBILITY REPORT**

O'HARE IAP AIR RESERVE STATION, CHICAGO, ILLINOIS

DATE:

October 27, 1993

CLIENT:

U.S. Army Corp of Engineers, Louisville District

PROJECT NAME:

Pollution Prevention Assessment and Feasibility Report

PROJECT LOCATION: Chicago O'hare IAP, Chicago, Illinois

CONTRACT NUMBER: DACA 27-92-D-0004

JAYCOR PROJECT

2768

NUMBER:





Date: 6/5/2015			Installation: O'Hare ARS - Chicago, IL							
Researcher:	Martha	Shirley			_					
Online				1	ļ.	AF Historical Research Ag AF Safety Center Misc. Document Review		er	ncy	
Document Na	me:	DR315918: La	nd Exchange A	greement						
Document Au	thor:	USAF								
Document Da	te:	10/5/1989, 199	94, and 1996							
Was copy of t	itle page o	obtained?:	X Yes					No (prov	vide reason)	ı
Notes: Searc	ched key v	vords "crash," "f	ire," "accident,"	"mishap,"	"AFFF,	" "foam," aı	nd "was	sh rack."		
Includes Land	l Exchang	e Agreement be	tween City of C	chicago an	d USAF	. Cites res	striction	s & build	ings include	d.
Includes listing	g of buildi	ng numbers and	I names.							
Includes deed	l description	on.								
Includes supp	lements e	xecuted in 1994	ļ							
Includes maps	s of areas	exchanged.								

LAND EXCHANGE AGREEMENT, O'HARE AIR RESERVE FORCES FACILITY, COOK COUNTY, ILLINOIS, PHASE I CLOSING: DESIGNATED PARCEL NO. 4A, COOK COUNTY, ILLINOIS (TWO (2) EASEMENTS ARE RESERVED UNTO THE UNITED STATES OF AMERICA)

DACA 11-032-ENG-5596 LEASE

> BLANK SPACE FOR USE BY THE RECORDER OF DEEDS

QUITCLAIM DEED

This QUITCLAIM DEED made and entered into this 544 day of

Nitology, 1920 by and between the United States of America,
hereinafter referred to as the grantor, acting by and through the
Secretary of the United States Department of the Air Force, under and
pursuant to the powers and authorities contained in the Act of Congress
approved August 10, 1956 (c. 1041, 70A Stat. 121, 10 U.S.C. §2233), and
acts supplementary thereto and amendatory thereof, and under the further
powers and authorities contained in the National Defense Authorization
Act, Fiscal Year 1989, Pub. L. No. 100-456, § 2603, 102 Stat. 1918,
2114-15 (1988), and the City of Chicago, Illinois, a municipal corporation organized and existing under and pursuant to the laws of the State
of Illinois, hereinafter referred to as the grantee.

WITNESSETH: That for the total consideration of the monetary sum of THIRTEEN MILLION ONE HUNDRED TWELVE THOUSAND EIGHT HUNDRED AND NINETY-SIX DOLLARS (\$13,112,896.00), the receipt of which is hereby acknowledged by the grantor, and for the contractual consideration of the mutual covenants and agreements (contractual terms, conditions, agreements, and covenants) as set forth and stated in a contract and agreement (Land Exchange Agreement Between the City of Chicago and the United States Air Force) made and entered into by and between the grantor and the grantee

30-89

0





Date: 6/5/2015			Installation: O'Hare ARS - Chicago, IL									
Researcher:	Martha	Shirley				_						
Type of resear	rch:	Online	DR/ER	AR ral Engine	e Search	ı		AF S	Historica Safety (Center	earch Ag Review	jency
Document Nar	me:	DR316714: Op	erating	Agreeme	nt betwe	en Unite	ed State	s and	City of	Chicag	go	
Document Aut	hor:	USAF										
Document Dat	e:	August 17, 199	8									
Was copy of ti	tle page o	obtained?:	X	Yes					No	(provi	de reaso	n)
Notes: Search	hed key v	vords "crash," "fi	re," "acc	cident," "r	mishap,"	"AFFF,"	' "foam,'	" and "	wash r	ack."		
Building 63: A	FFF 2-(2-	-butoxyethoxy) e	thanol,	syn Dieth	nylene gl	ycol Mor	nobutyl	Ether	spilled	on 8/2	1/94 at C)'Hare
		ide EBS as SPL		•			•					
SPL-56, SPL-6	63-5, SPL	63-6, SPL2501	-49 also	noted as	s being <i>F</i>	AFFF 2-(2-butox	yethox	y) etha	ınol.		
Describes City	of Chica	go use of Buildir	ng 63 (C	rash/Fire	Station)	after de	parture	of AN	G.			
Includes buildi	ng numbe	ers with dates of	constru	ction.								
Notes that the	OWS at I	Building 63 is AC	oc ows	S 63B an	d is activ	e and ar	n expan	ded sit	te inves	stigatio	n is to b	е
conducted.												

OPERATING AGREEMENT

BETWEEN

UNITED STATES OF AMERICA

AND

CITY OF CHICAGO





Date:	6/8/201	Installation: O'Hare ARS - Chicago, IL
Researcher:	Martha	Shirley
Type of research	ch:	Online - BRAC AR AF Historical Research Agency
		Online - General Engine Search AF Safety Center
		χ BRAC DR/ER Misc. Document Review
		CD 580_317262
Document Nam	ne:	DR317262: Property Categorization Summary
Document Auth	nor:	USAF
Document Date	e:	October 1, 1998
Was copy of tit	le page o	otained?: X Yes No (provide reason)
Notes: Search	ned key v	ords "crash," "fire," "accident," "mishap," "AFFF," "foam," and "wash rack."
Summarizes bu	uilding nu	mbers, investigations completed, current status.
Building 81: 92	8 Wareh	suse Supply & Equipment - sampling performed at OTH-1 as part of Phase II EBS
indicated soil c	ontamina	tion above SSLs, remedial investigations at OTH-1 indicates risk estimates are between
10-6 and 10-4	for all ca	cinogenic hazardous substances and are below HI of 1 for non-carcinogenic.
2501: Apron - r	emedial	nvestigations conducted at IRP-OT-08 indicate detected contaminant concentrations
exceeded SSL	. Calcula	ted risk between 10-4 and 10-6 for carcinogenic and below HI of 1 for non-carcinogenic.
Indicates SPL-2	2501-2 is	associated with IRP-OT-08
Building 81 bui	lt 1992.	
Building 17: Ba	nd Cente	r - sampling conducted at UST-17A during Phase II EBS investigation indicates the
presence of pe	troleum (ontamination below SSLs.
Building 55: Ba	se Pave	nent and Grounds Facility - sampling conducted as part of Phase II EBS indicates haz.
substance cont	aminatio	above SSLs.
Building 406 (d	emolishe	d 1975)
2501: Apron - r	emedial	nvestigation conducted at IRP-SS-05 indicates detected contmainant concentrations
exceed SSL; ris	sk below	10-6 for carcinogens and below HI of 1 for non-carcinogens
2531: Pad, Airc	craft was	rack - sampling conducted at OTH-2531-1 and OTH-2531-2 for Phase II EBS indicated
the presence o	f haz sub	stance contmainatiion above SSLs.

PROPERTY CATEGORIZATION SUMMARY





Date: 6/8/2015				Installation: O'Hare ARS - Chicago, IL					
Researcher:	Martha	Shirley							
Online X BRAC CD 580_31726			C DR/ER	eral Engine	Search		AF Sa	storical Resea afety Center Document Re	
Document Nan	ne:	DR317263: U	JSAF Rea	al Property	Inventory I	Detail List			
Document Auth	nor:	USAF							
Document Date	e:	July 13, 1999)						
Was copy of tit	le page o	btained?:	Х	Yes				No (provide	e reason)
Notes: Search	ned key w	ords "crash,"	"fire," "ac	cident," "m	ishap," "AF	FFF," "foam	n," and "w	/ash rack."	
Building 43 Co	de 88021	7 AFFF PA S	orinkler S	ystem - 88	5SF - Year	constructe	ed 1993.		
Building 2917 -	880236	Foam system	- year co	nstructed 1	993.				
Building 25 - S	ecurity Tr	aining Facility	, constru	cted 1963,	utilities shu	ut off since	1998, fire	e dept. used fa	acility for
training purpos	es, surve	y performed i	n Sept 19	99 indicate	d some da	mage to ce	eilings du	e to fire trainir	ng.
Building 39 - D	ining Hall	- 1999 surve	/ indicate	s fire trainir	ng room ha	as leaking o	ceiling.		
Building 45 - Fi	ire Detect	tion Shed (PC	L) - cons	tructed 199	3.				
Building 63 - Fi	ire Depar	tment - consti	ucted198	0.					
Inventory inclu	des fire tr	uck P-12 in y	ard at Bui	lding 46.					
Inventory inclu	des fire tr	uck P-12 in y	ard at Bui	lding 50.					
Inventory inclu	des fire/re	escue truck in	yard at B	uilding 55.	List city P	OC as Chi	ef Connel	lly 773-686-23	306.

Sent By: HQ AFRC/CEV;

912 327 0108; Jul-14-99-14:07; Page 5/13

PREPARED: 13 JUL 1999 13:28 PREPARED: 13 JUL 1999 13:28
Version: 08.02.000 06 Nov 1998 ER7115 USAF REAL PROPERTY INVENTORY DETAIL LIST AS OF: 13 JUL 1999 SAF-MIL(A)7115

			PNB					%		CHD: A	FR
INSTALLATION: O'HARE	ARP		I NO				-				v.n
	*CATEGORY	******	*		AREA		OTHER-*	*RENT	cost	EST	YR CH
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00040 1 P 4 D 54	730771 CHAPEL, B		1244			1244SF	30SE		1000		1972
00040 1 P 4 X 54	821113 HTG FR CEI		19200			19200SF			419848		1990
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57						6000SF			232413		1966
00041 1 P 2 8	610913 DISASTER	2				1600SP					1966
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00043 1 P 1 A 54	125977 PMP STN,	LF				172881	F		1343288		1993
00043 1 P 1 X 54	880211 CLSD HD A	0 4	39.1			630\$	F 5KE		3867	-	1993
00043 1 P 1 X 54	880217 AFFF PA S	4				885si	F 12H0		18666		1993 1993
00043 1 P 1 X 54	880221 AUTO FR D					1728\$			6487		1993
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00044 1 P 1 E 54	121111 PETROL OF	S BLDG	•2			40445			12000		1993
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	811149 ELEC PHR	STN REDG				819	i.e		105268	l .	1993
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00048 1 P 1 A 54	880233 OTHER FR	4					16	A .	157	,	1993
1 20040 17 1 7 24											





Date: 6/9/2015				Installation: O'Hare ARS - Chicago, IL						
Researcher:	Martha	Shirley			_					
Type of resear Document Nar		Onl X BR. CD 580_31	ine - BRAC AR ine - General E AC DR/ER 7624 AF Form 1441	ingine Search		AF Saf	torical Rese ety Center Document Re	arch Agency eview		
Document Aut			are Transition (т					
Document Dat		June 22, 19		Office (OTO)						
Was copy of tit				es			No (provid	e reason)		
Notes: Search	ned key w	ords "crash,	" "fire," "accide	nt," "mishap,"	"AFFF," "foar	n," and "wa	ash rack."			
Documents pe	rtaining to	transfer of t	he base.							
Transfer and a	cceptanc	e of military ı	eal property lis	ts Building 81	as having 88	0217 AFFF	PA sprinkle	er system.		
Building 30 - M	1aintenan	ce hangar, c	onstructed 196	1 - notes that	Room 120 ha	s a deluge	fire system	that is		
chained up wit	h padlock	s.								



UNITED STATES AIR FORCE

O'Hare Transition Office PO BOX 66486 6596 N. Patton Rd O'Hare IAP Air Reserve Station, Illinois

22 June 99

MEMORANDUM FOR: Phil Henry

FROM: O'Hare Transition Office (OTO)

SUBJECT: AF Form 1441 and DD 1354

1. Enclosed please find original copies of AF Form 1441 and DD 1354 for O'Hare Air Reserve Station on buildings 1, 8, 32, 33, 34, 35, 36, 53, 57, 58, 66, 67, 76, 77, 81, 133, 30.

2. If you should have any questions, please feel free to contact me at (773) 825-5690.

DARLENE KOLASSA

Real/Personal Property Specialist

2 Attach AF 1441 DD 1354





Date: 6/4/2015		Installation: O'Hare ARS - Chicago, IL						
Researcher: <u>Martha</u> Type of research:	χ Online	- BRAC AR - General Engine Sea	arch	AF Historical Research Agency AF Safety Center Misc. Document Review				
Document Name: Document Author:	Global Security							
Document Date:	visited 6/4/2019	5						
Was copy of title page		X Yes		No (provide reason)				
Notes: http://www.glol	oalsecurity.org/m	ilitary/facility/ohare.ht	<u>m</u>					
Website provides inform	nation on decom	missioning of O'Hare	ARS as part of B	RAC-1995.				

Global Security.org

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MILITARY

O'Hare IAP Air Reserve Station

O'Hare International Airport was named for U.S. Navy Lt. Cmdr. Edward H. "Butch" O'Hare, a Medal of Honor recipient killed Nov. 26, 1943, in battle for the Gilbert Islands, it is located 22 mi. northwest of Chicago's loop.

The 1995 the Defense Base Closure and Realignment Comission modified the closure of O'Hare IAP Air Reserve Station as recommended by the 1993 Defense Base Closure and Realignment Commission by deactivating the 928th Airlift Wing (AFRES), rather than relocating the unit, and distributing its C-130 aircraft to Air Force Reserve C-130 units at Dobbins ARB, Georgia and Peterson AFB, Colorado, or as appropriate.

BRAC-95 closed O'Hare IAP Air Reserve Station as proposed by the City of Chicago; relocate the 126th Air Refueling Wing (ANG) to Scott AFB, Illinois, and relocate the remaining assigned Air National Guard units to locations acceptable to the Secretary of the Air Force provided the City of Chicago can demonstrate that it has financing in place to cover the full cost of replacing facilities (except for FAA grants for airport planning and development that would otherwise be eligible for Federal financial assistance to serve the needs of civil aviation at the receiving location), environmental impact analyses, moving, and any added costs of environmental cleanup resulting from higher standards or a faster schedule than DoD would be obliged to meet if the base did not close, without any cost whatsoever to the Federal government. If the City of Chicago agreed to fund the full cost of relocating the Army Reserve activity, such activity was to be relocated to a mutually acceptable site; otherwise it shall remain. BRAC-95 extended the commencement of the closure from the recommendation of the 1993 Commission to July, 1996 with a completion date no later than July, 1999. If these conditions were not met, the 126th Air Refueling Wing (ANG) and other assigned units were to remain at O'Hare International Airport.

NEWSLETTER						
Join the GlobalSecurity.org mailing list						
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Further Reading





Date: 6/4/2015	Installation: O'Hare ARS - Chicago, IL
Researcher: Mai	tha Shirley
Type of research:	Online - BRAC AR Online - General Engine Search BRAC DR/ER AF Historical Research Agency AF Safety Center Misc. Document Review
Document Name:	Factsheets
Document Author:	AFCEC
Document Date:	visited 6/4/2015
Was copy of title page	ge obtained?: X Yes No (provide reason)
Notes: http://www.1	26arw.ang.af.mil/resources/factsheets/factsheet.asp?id=13130
Website provides his	story of the 126th Air Refueling Wing. Information was posted in 2008.
O'Hare ARS studied	for closure in 1993 and in 1995 BRAC was complete and decided to relocate the 126th
ARW to Scott AFB in	n Belleville Illinois in July 1999.
Final retirement cere	emony included live speech by US President.
Base officially close	d on July 28, 1999.

126th Air Refueling Wing





ART HISTORY RESOURCES

CAREERS

UNITS QUESTIONS

JOIN THE AIR NATIONAL GUARD

Resources > Fact Sheets > The History of the 126th Air Refueling Wing

THE HISTORY OF THE 126TH AIR REFUELING WING

Posted 9/26/2008

Printable Fact Sheet

The History of the 126th Air Refueling Wing

Throughout much of the 20th century, military aviation units have been formed in response to national emergencies. Often, a unit would undergo a change in mission or numerical designation as a result of a post-war reorganization. Others might disband altogether. New units and missions have also grown out of the fantastic developments in aviation, changing the face of a unit by order of modernization. A unit's historical lineage then, has many birth dates and places. The 126th Air Refueling Wing is no different, as many units have been designated and deactivated through the years, many different kinds of aircraft have been assigned, and the unit has moved - across town and across the state! All of this makes for a wonderful and rich history that each member takes pride in.

The Chicago Years 1927 - 1999 World War II

We find our beginnings in Chicago, at an armory on Michigan Avenue and 16th Street in 1927. This was the first home of the 108th We find our beginnings in Chicago, at an armory on Minchigan Avenue and fold street in 1927. This was the instruction of the foot Observation Squadron (the predecessor of the present day 108th Air Refueling Squadron), the oldest unit in the Illinois Air National Guard. The original 16 officers and 74 enlisted men were mostly World War I velerans from Chicago, flying PT-1 aircraft. From this small contingent grew a major operation that moved to Midway Municipal Airport. The unit distinguished itself in World War II, performing anti-submarine patrols in 0-47 aircraft from a base in the Panama Canal. In September 1943, the unit was deactivated, enabling most of its members to fortify active duty units for the remainder of the war.

Following World War II, the Army Air Forces were significantly reorganized, as was the National Guard in Illinois. The 56th Fighter Wing was assigned to Orchard Place Airport in Park Ridge in 1946. The 66th Fighter Wing succeeded the 56th FW in 1947. In June of that year, the 68 FW gained the 344th Bombardment Group (L), a highly decorated World War II unit that was redesignated the 126th Bombardment Group (L). This was the first time the 126th numerical designation was used in Illinois but this is not the predecessor of the present day 126th Air Refueling Wing. The 66 FW also gains the 168th Bombardment Squadron (L) in 1947.

On 1 November 1950, the 66 FW is redesignated the 126th Composite Wing at Midway Municipal Airport. The 126 CW is the predecessor of the 126th Air Refueling Wing. Just six months later, the 126 CW is redesignated the 126th Bombardment Wing (L). The 126 BW is headquartered at O'Hare Airport with the 126 BG and the 168 BS. All of the units now fly the B-26 Invader. The former 108 OS becomes the 108th Bombardment Squadron (L), It is the only unit remaining at Midway. It too, flies the B-26.

Korean Conflict In April of 1951, the 126 BW, 126 BG and 108 BS are all activated for the Korean Conflict, coming together at Langley Field in Virginia to prepare for overseas deployment. The units are in France by December of that year, beefing up United States Air Forces in Europe, as America is closely monitoring China and Russia during the conflict. These units overcame tremendous obstacles in accomplishing their mission: severe weather, poor living conditions, and a mid-air collision. When they returned from

obstacles in accomplishing their missions severe wear the poor living containing, and a find-an consistent when they stated not duty in January of 1953, the 126 BW, 126 BG, and 108 BS all returned to Midway. A series of new aircraft and missions were assigned from 1953 to 1961 (F-51s, F-84s and F-96s). Move to O'Hare and the Assignment of Geographically Separated Units in the spring of 1954, the 126 BG, the 108 BS and support units moved to O'Hare, leaving the 126 BW behind at Midway. Also in 1954, the 33rd Infantry Band of the Illinois National Guard was redesignated the 566th Air Force Band and assigned to the Wing at Midway, This was the first Geographically Separated Unit to be assigned to the Wing. They often drilled at O'Hare

Both the 217th Electronics Installation Squadron (now the 217th Engineering and Installation Squadron) and the 264th Communications Squadron (now the 264th Combat Communications Squadron) were assigned to the Wing at various times and eventually moved to O'Hare with the other units. In 1958, the 168 BS was deactivated and most of the members joined units in the Wing and GSU's. The headquarters finally moved to O'Hare in 1959.

The Air Refueling Era Begins - First in the Air National Guard

The Air Refueling Era Begins - First in the Air National Guard. In 1961, the unit received the first air refueling mission in the Air National Guard. Hangar 19 was completed just in time to receive the first KC-97 flying tanker in July and the unit was designated the 126th Air Refueling Wing. The KC-97 would take the Wing back to Europe, refueling USAFE aircraft under of CREEK PARTY from 1967 to 1976. Some 600 trans-Allantic flights were flown and 150 million pounds of fuel off-loaded to USAFE and NATO aircraft. It was the first time the Air National Guard had performed a continuous operation without activation. It was also during this period that the Wing lost its flying Group, by federal deactivation.

In July of 1976, the unit received the first KC-135 Stratotanker, the aircraft we are still flying today. These tankers ushered in the Strategic Air Command years and in 1979, the unit went on 24-hour alert status with SAC. The alert would be maintained until the command stood down in 1991.

The Persian Gulf War

The Persian Guit war. The 126 RKW began volunteer operations in support of operation DESERT SHIELD in August of 1990 until the Wing was federally activated on the 20th of December of that year. When DESERT STORM began on the 16th of January 1991, the Wing was in place at Abu Dhabi in the United Arab Emirates. They formed up with other units as the 1712th (P) Air Refueling Wing. The 1712th also conducted refueling sorties from Saudi Arabia. From August of 1990 to March of 1991, the Wing offloaded over 31 million pounds of fuel, with over 27 million pounds offloaded in the last three months of the war. The unit returned to a ticker-tape parade down Michigan Avenue in Chicago

Great Flood of 1993

On July 16, 1993, the Governor of Illinois ordered 270 members of the 126th Air Refueling Wing to State Active Duty to support the Illinois National Guard's flood control mission. Members patrolled levees, sandbagged boils and provided security on a 24 hours basis. Many guardsmen aided in evacuation of residents. Medical personnel aided thousands. The unit had members in Alton, Anna, Carolton, Carbondale, Cahokia, East St. Louis, East Carondelet, Edwardsville, Evansville, Grafton, Granite City, Hartford Jerseyville, Murpheesboro, Prairie du Rocher, Quincy, Springfield, and Winchester. By the time the crisis was under control in the early fall, over 700 personnel from the 126th Air Refueling Wing and assigned units had pulled duty in the flood ravaged towns.

90's Missions: The Balkans, Southwest Asia, and NATO AWACS

Throughout the 90's, the Wing supported on-going operations in Southwest Asia and NATO operations in Europe, including volunteer support of operation ALLIED FORCE in Kosovo. The unit has also been supporting an ongoing NATO Airborne Warning and Control System (AWACS) mission in Germany since 1993. Other missions supported in this decade: RESTORE HOPE, (Somalia) and SUPPORT JUSTICE IV (Panama)

Distinguished Visitor Mission
The unit began performing a Distinguished Visitor mission in June of 1997, when the 928th Airlift Wing was disbanded (the host Air

Inside the 126th ARW

F: Search

search 126ARW View All RSS

Wing Information





Date: 6/3/2015			Installation: O'Hare ARFF						
Researcher: Type of resear	Martha ch:	Online	- BRAC AR - General Engine S	Search	X AF Historical Research Agency AF Safety Center				
BRAC			DR/ER	Į	Misc. Document Review				
Document Nar			rical Research Age	ency Records	_				
Document Aut		USAF							
Document Dat		Various							
Was copy of tit	tle page o	btained?:	Yes	Х	No (provide reason)				
Notes: Search	ned site fo	or "O'Hare ARFF	F," "O'Hare ARS" a	nd "O'Hare ANG	G," then "fire," "crash," "accident,"				
' <u>-</u>			s-built," and "real pr						
No findings.									
					·				





Date:	6/4/2015	5	<u>_</u>	Installation	: O'Hare	ARFF				
Researcher: Type of resear	Martha ch:	Online	e - BRAC AR e - General E	ngine Search	–	X	AF Sa	fety Cent	esearch Aç ter nt Review	gency
Document Nar		Table provided		e Safety Cen	ter					
Document Dat	e:	Various								
Was copy of tit	tle page o	btained?:	X Ye	es				No (pro	ovide reasc	on)
Notes: <u>Search</u> No findings.	ned site fo	or "O'Hare ARF	F," "O'Hare <i>A</i>	ARS" and "O'	'Hare AN	IG".				

		TRANSFER AND ACCE	PTAN	CE (OF MILIT	ARY REAL	_ PROP	ERTY			Form Ap OM8 No 0		18
Pu	blic reporting bure	den for this collection of information is estimate	to averag	ge 30 mi	nutes per respons	e, including the time	e for reviewing	instructions,	, searching existing da	PAGE ta sources,	I of	intaining	PAGES the data
ne	eded, and comple	iting and reviewing the collection of information. arters Services, Directorate for Information Oper	Send com	iments i	egarding this burd	den estimate or any o	other aspect of	this collection	on of information, incli	uding sugges	stions for reducir	ig this bu	irden, to
928TH		on / Activity / Service and Zip Code)	92	ERATING	3. DISTRICT CODE	4. OPERATING AGENCY AFRES	s. DATE	ch 99	6. JOB NUMBER	7. SERL	al number	8. CONT	
				W/DE ERATIONS	II. DISTRICT	12, OPERATIONS	13. ACCOUNT 14. ACCOUN		IS. TYPE (F CONSTRUC	TION	16. PROJEC	PROJECT
	: (Installation A	Activity / Service and Zip Code	UNI		CODE	AGENCY	I NG NUMBER	TABLE OFFICER NUMBER	A. NEW CONSTI	C P	BENF/O PHYSICAL C FINAN. COM OTHER (SEPC	ом.	FACILITY 0081
ITEM NO. 17	CATEGORY CODE 18	FACILITY (Category description) 19	NO. OF UNITS 20	TYPE 21	UNIT OF MEAS 22	TOTAL QUANITY 23		COST 24	DRAW NUM8 25	ER	R	EMARKS 26	s
1	442758	WHSE SUP & EQUIP BSE	1	Р	SF	10500	\$	702,254	.00				
2	880217	AFFF PA SPRINK SYS	,1	Р	SF/HD	10500/1		\$28,000	0.00				
3	890126	A/C WINDOW UNITS	1	P	SF/TN	2500/5	i	\$580	0.00				
24	R A				Fig. 1	1		=	2.	14			=
a	occordance v	OF COMPLETION: The facilities with maps, drawings, and specific the authorized representative of the authorized representative.	ations a	and ch	ange orders		ED STY SIGNA	~ ~	luxen	<u>.</u>		C ·/	7.55
TRANS	FERRED BY Sign	studen .			TITLE (Post Engr. Base Civ Engr. / Navy Rep.) Managing Deputy Commissioner					29. PROPERTY VOUCHER NUMBER			
	Area Engr. / Base	Engr./DPWO; sition Coordinator		Real Estate 99-0019)19			

DD Form 1354, FEB 90 (EV)

PREPARED: 13 JUL 1999 13:28

ER7115 Version: 08.02.000 06 Nov 1998

USAP REAL PROPERTY INVENTORY DETAIL LIST AS OF: 13 JUL 1999 SAF-MII(A)7115

Jul-14-99 14:10;

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COMMAND TOTALS

TOTAL NUMBER OF RECORDS: TOTAL NUMBER OF FACILITIES: TOTAL NUMBER OF BUILDINGS: TOTAL SQ FT OF BUILDINGS:		355 - 164 - 53 644153	TOTAL COST TO GOVERNMENT: TOTAL COST ROUNDED (DOD): TOTAL ESTIMATED VALUE: TOTAL EST-VALUE ROUNDED (DOD):	66685476 66681 6
TOTAL REPLACEMENT COST (000):	:	405544		





Date:	6/2/201	5		Installation	: O'Hare	ARFF
Researcher:	Martha	Shirlov				
Nesearcher.	Martha	Silliey			_	
Type of resear	rch:	Online	e - BRAC AR e - General Enç c DR/ER	gine Search	n	AF Historical Research Agency AF Safety Center X Misc. Document Review
Document Na	me:	O'Hare Transf	er Documents	for Parcel 3	3	
Document Aut	hor:	USAF - O'Hare	e Transition Of	ffice (OTO)		
Document Dat	te:	11/16/1999				
Was copy of ti	tle page c	btained?:	X Yes	i.		No (provide reason)
Notes: Searc	hed key w	vords "crash," "I	fire," "accident	," "mishap,"	"AFFF,"	' "foam," and "wash rack."
A Personal Pr	operty Inv	entory indicates	s 5 barrels of A	AFFF at Buil	lding 55.	
		em at Facility 0			- U	
-		-				
						-

OlHare Transfer Doa For Parcel 3



UNITED STATES AIR FORCE

O'Hare Transition Office PO BOX 66911 10601 W Higgins Rd Chicago, Illinois 60666-0911

16 NOV 99

MEMORANDUM FOR: DEPARTMENT OF AVIATION

ATTN: MS. KITTY FREIDHEIM

DEPUTY COMMISSIONER OF REAL ESTATE

P. O. BOX 66142 CHICAGO, IL 60666

FROM: O'HARE TRANSITION OFFICE

POB 66911

CHICAGO, IL 60666-0911

SUBJECT: O'HARE TRANSFER DOCUMENTS FOR PARCEL 3

1. The O'Hare Transition is forwarding the final documents for the transfer of Real Property/Personal Property within Parcel 3 from the Air Force to the City of Chicago. The following will explain the contents enclosed.

The *Bill of Sale* includes a detailed inventory by building number of the Personal Property/Equipment within Parcel 3.

The *DD1354* indicates the Real Property, i.e. Generators A/C units etc., within each facility. Also, provided is an Air Force listing of Real Property Codes that pertain to the DD1354.

The AF1441 is an official facility transfer document that correlates to the DD1354.

The SF97's are Certificates to Obtain Title to a Vehicle, self-explanatory.

Joint Survey & Inspection of Condition of Government Leased Property

Forms indicate the physical condition of each facility with Parcel 3.

- 2. As for informational purposes, the video tapings were completed by DOA, Mr. Jim Glowa and the OTO, Ms. Darlene Kolassa. A copy of the videos have been provided to our office as of 10/99. The blueprints that are applicable to the Military Installation have been forwarded to DOA, Facilites, Ms. Susan Joyner.
- 3. At this time, the O'Hare Transition Office would like to extend their appreciation to your organization to enable our office to transfer this property in an effective and efficient manner. If we can provide any additional assistance to your office please feel free to contact us at any time.





Date:	6/4/2015	5		Ins	stallation:	O'Hare	ARFF					
Researcher:	Martha	Shirley				=						
Type of resear	rch:	χ On	line - BRA line - Gene AC DR/EF	eral Engin	e Search			AF Sa	storical Ifety Ce Docum	enter	rch Agen view	су
Document Nar	me:	Demolition	of Surplus	Structure	s Associa	ated witl	h the Fo	rmer O'	Hare Al	RFF		
Document Aut	hor:	Landrum &	Brown, Inc	corporated	d							
Document Dat	te:	3/11/2002										
Was copy of ti	tle page o	btained?:	X	Yes					No (p	orovide	reason)	
Notes: <u>Searc</u>	hed key w	ords "crash,	" "fire," "ad	ccident," "	mishap,"	"AFFF,	" "foam,'	' and "w	ash rac	ck."		
City of Chicag	o propose	s to demolis	h 27 struc	tures at fo	rmer bas	e. Provi	ides lists	of Build	ding to	be dem	nolished.	
Former O'Hare	e ARFF 35	52 acres with	nin NE cor	ner of O'H	are Inter	national	Airport.					
History of site	presented	l: three majo	r eras - 19	65 to 196	8, 1976 t	o 1978	and 198	5 to 198	9. Bas	e has r	emained	
essentially und	changed s	ince 1989.	Formerly s	erved as	site for IL	. ANG th	nat reloc	ated to	Scott.			

Documentation to Support Issuance of a Categorical Exclusion Determination for the

DEMOLITION OF SURPLUS STRUCTURES ASSOCIATED WITH THE FORMER O'HARE AIR RESERVE FORCES FACILITY (ARFF)

AT

CHICAGO O'HARE INTERNATIONAL AIRPORT CHICAGO, ILLINOIS

Prepared for:

DEPARTMENT OF AVIATION City of Chicago, Illinois

Prepared by:

Landrum & Brown, Incorporated





Date:	6/4/2015	5		Ins	stallation:	O'Hare ARF	F			
Researcher:	Martha	Shirlev								
Type of resear		Onlir X Onlir	ne - BRA(ne - Gene C DR/ER	eral Engine	e Search		AF S	istorical Re afety Cento Documen		ency
Document Nar	ne:	US Geologica	al Survey	/-National	Water Qu	uality Assessi	ment Pro	gram		
Document Aut	hor:	USGS								
Document Dat	e:	visited 6/8/20)15							
Was copy of tit	tle page o	btained?:	X	Yes				No (pro	ovide reasor	า)
Notes: http://i	l.water.us	gs.gov/nawqa	ı/uirb/des	scription/ge	eology.htr	<u>nl</u>				
Provided addit	ional infor	mation on site	e soils, ge	eology, an	d physiog	graphy.				



National Water-Quality Assessment Program Upper Illinois River Basin

Return to the previous Description of the Basin Page.

Geology of the Upper Illinois River Basin

For a more detailed description of the Basin, see the Environmental Settings Report (WRIR 98-4268)

Bedrock Geology



The entire UIRB is underlain by Precambrian granitic rocks at depths ranging from about 1,000 ft below land surface in the northern part of the basin to about 7,000 ft in the southeastern part. The Precambrian rocks are overlain by sedimentary rocks of the Cambrian System. These sedimentary rocks are predominately sandstone, and include three of the most heavily used aquifers in the study area. Ordovician-aged rocks overlie the Cambrian rocks and are composed predominately of limestone and dolomite, but also include some sandstone and shale. Where present, the Maquoketa Shale

confines the Cambrian-Ordovician bedrock aquifer. The <u>uppermost bedrock units</u> of the Kankakee River Basin are predominately Silurian-Devonian dolomite and limestone, and shale (Willman and others, 1975). The uppermost bedrock units of the Iroquois River Basin are predominately Silurian-Devonian dolomite and limestone, and shale, Mississippian siltstone, and Pennsylvanian sandstone. The uppermost bedrock units of the Chicago and Des Plaines River Basins are predominately undifferentiated Silurian-Devonian dolomite and limestone, and Ordovician shale of the Maquoketa Shale Group (Willman and others, 1975; Gray and others, 1987). The uppermost bedrock units of the Illinois River Basin are predominately Pennsylvanian shale of the Carbondale Formation, Ordovician shale of the Maquoketa Shale Group, and Ordovician limestone and dolomite of the Galena-Platteville Formation (Willman and others, 1975).

Physiography and Surficial Geology



Bedrock has been exposed in places along the Illinois, Des Plaines, and Kankakee River valleys by glacial processes such as meltwater floods (Illinois State Geological Survey, 1973). Except for these bedrock exposures in major river valleys, <u>unconsolidated glacial (Quaternary) deposits</u> cover most of the study area. In recent times, glacial deposits and features have been modified by wind and water erosion (Piskin and Bergstrom, 1975). The glacial and erosional processes are the sources of the present-day landforms in the UIRB; these landforms are the basis for the following

physiographic definitions.





Date: 6/4/2015					_	Inst	tallation:	O'Hare	e ARS -	Chica	go, IL			
Resea	cher:	Martha	Shirley											
Type o	f researc	h:	X	Online	- BRAC - Gener DR/ER	AR al Engine	Search			AF S	Historica Safety (c. Docu	Center		Agency
Docum	ent Nam	e:	City of 0	Chicago	Fire De	partment								
Docum	ent Auth	or:	City of 0	Chicago	Fire De	partment								
Docum	ent Date	:	visited 6	6/4/2015	5									
Was co	py of title	e page o	btained?	? :	X	Yes					No	(provi	de reas	on)
Notes:	http://w	ww.cityo	fchicago	.org/city	//en/dep	ts/cfd.htm	nl							
Websit	e provide	ed link fo	r a FOIA	reques	t. A FO	I request	was sub	mitted	but no i	respon	se was	receiv	ed as o	f
6/12/20)15. The	FOIA re	quest pe	ertained	to locat	ing forme	er fire fig	hters w	ho may	have v	vorked a	at O'H	are AR	S or
have k	nowledge	e of fire fi	ghting p	ractices	and ac	tivities at	the form	er base	Э.					
												_		



Department **Fire**





The Chicago Fire Department (CFD) promotes fire safety, provides emergency care, and extinguishes fires.

CFD is the largest fire department in the midwest, and one of the nation's largest departments throughout the United States. It's also one of the oldest major organized fire departments, established before 1833.

What We Do

Administrative Services Employee Relations Fire Prevention Operations

Supporting Information

CFD Definitions
CPAT Candidate Preparation Guide
EMT and Paramedic Information
File a Fire FOIA Request
Frequently Asked Questions

City Data

FOIA Request Log - Fire





Date:	6/4/201	5	Insta	llation: O'Hare Al	RFF
Researcher:	Martha	Shirley			
Type of resear	rch:	Online	e - BRAC AR e - General Engine \$ s DR/ER	Search	AF Historical Research Agency AF Safety Center X Misc. Document Review
Document Nar	me:	Real Property	Records		
Document Aut	:hor:	USAF			
Document Dat	te:	September 20	14		
Was copy of ti	tle page	obtained?:	Yes	NA	No (provide reason)
Notes: Searc	hed site f	or "O'Hare ARF	F," "O'Hare ARS" a	nd "O'Hare ANG"	
No Findings.					

APPENDIX E

RESEARCH CHECKLIST

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Signature: Martha Shirley

PFC Site Assessment/Research Checklist



Perfluorinated Compounds (PFCs) Release Determination, Delineation, and Remediation at Multiple BRAC Bases, Contract FA8903-08-8766, Task Order 0177

POC/Personnel Interviews	Yes	No (include reason)
Did installation POC complete PFC General Information Questionnaire?	Х	
Was additional contact personnel provided by POC (i.e. Fire chief, longtime base employee). If yes, provide names and contact information (position/rank, phone number, e-mail address) below.		No contacts were provided; indicated they didn't know any.
Contact information:	Not applica	ble
Contact information:	Not applicab	le
Was Telephone Interview Log completed for each person contacted?	Х	Talked with former Fire Chiefs.
Online Research	Yes	No (include reason)
Searched for the following key words in online AF BRAC Administrative	Record and	d general search engine?
"crash"	Х	
"fire"	Х	
"accident"	Х	
"mishap"	Х	
"AFFF" and "aqueous film forming foam"	Х	
List additional words searched in online AR:	washrack	
Reviewed Environmental Baseline Survey?	Х	
Located and reviewed Environmental Impact Statements and/or Environmental Assessments?	Х	
Were Real Property Records (as-built drawings) located?		Drawings were obtained from AF Documents
Were installation maps with building functions located?	Х	From AR Documents
Located and reviewed additional reports suggested by POC?		None suggested.
Located historic aerial surveys (1970 - present)?	N/A	Did not perform.
Archival Repository Research	Yes	No (include reason)
Searched for the following key words in online Air Force Historical Res	earch Agenc	ey Records Index?
"crash"	Х	
"fire"	Х	
"mishap"	Х	
"accident"		
"as-built" and/or "as built"	1	
"real property"		
"AFFF" and "aqueous film forming foam"		
List additional words searched in Index:		
Conducted file review at the Air Force Historical Research Agency Records at Maxwell AFB?	X	No records found in index provided.
Conducted file review at the Air Force Safety Center at Kirtland AFB?	Х	No records found in index provided.

Date: June 9, 2015

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